

OCEAN DUMPING

HEARINGS

BEFORE THE

SUBCOMMITTEE ON OCEANOGRAPHY

AND THE

SUBCOMMITTEE ON FISHERIES AND WILDLIFE
CONSERVATION AND THE ENVIRONMENT

OF THE

COMMITTEE ON
MERCHANT MARINE AND FISHERIES
HOUSE OF REPRESENTATIVES

NINETY-EIGHTH CONGRESS

FIRST SESSION

ON

REAUTHORIZATION AND OVERSIGHT OF TITLE III (H.R. 2062)

FEBRUARY 24, 1983

REAUTHORIZATION AND OVERSIGHT OF TITLE I (H.R. 1761)

MARCH 15, 1983

REAUTHORIZATIONS AND OVERSIGHT OF THE NATIONAL OCEAN
POLLUTION PLANNING ACT (H.R. 1546) AND TITLE II (H.R. 1547)

APRIL 25, 1983

Serial No. 98-14

Printed for the use of the Committee on Merchant Marine and Fisheries



U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1983

25-066 O

H561-26

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REAUTHORIZATION AND OVERSIGHT OF TITLE III

THURSDAY, FEBRUARY 24, 1983

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON OCEANOGRAPHY AND SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT, COMMITTEE ON MERCHANT MARINE AND FISHERIES,

Washington, D.C.

The subcommittees met, pursuant to notice, at 10:10 a.m., in room 1334, Longworth House Office Building, Hon. Norman E. D'Amours (chairman of the Subcommittee on Oceanography) presiding.

Present: Representatives D'Amours, Breaux, Anderson, Hughes, Hutto, Bosco, Tallon, Ortiz, Boxer, Forsythe, Pritchard, Young, Shumway, Schneider, and McKernan.

Staff present: Howard Gaines, Darrell Brown, Mary Pat Barrett, Glenn DeLaney, Will Stelle, Tom Kitsos, Ed Welch, Dan Ashe, Debbie Storey, Margaret O'Bryon, Bob Deibel, Barbara Wyman, and George Mannina.

Mr. D'AMOURS. Good morning. Today's joint hearing of the Subcommittee on Oceanography and the Subcommittee on Fisheries and Wildlife concerns reauthorization of the National Marine Sanctuaries Program, which is Title 3 of the Marine Protection, Research, and Sanctuaries Act. Today's witnesses have all been active participants in various aspects of this program, and I am sure are going to provide some valuable advice on its scope, management, and philosophy.

The marine sanctuaries program was created in 1972. The purpose was to preserve or restore distinctive marine areas for their conservation, recreational, ecological, or esthetic values. Since its inception the program has weathered a series of management problems. In its first 7 years it operated without any appropriated funding. When it finally did receive some administrative attention, it was as a result of President Carter's directive to seek out sites in imminent danger from oil and gas development on the Continental Shelf, the acceleration of which he was at that time proposing. The controversial nature of this directive was compounded by a site selection process which allowed for the consideration of marginal sites and sites that were thousands of square miles in area.

It is to the credit of the current NOAA management team, in my opinion, that these problems have been forcefully dealt with. To a great extent, the recent round of site evaluations conducted by regional teams around the country was free of rancorous controversy.

There were some exceptions, and these exceptions are going to be dealt with in today's hearing, but it is fair to say that the administration of this program has come a long way in recent years.

In 1981, as a result of a variety of problems that had plagued the sanctuaries program, both the Congressional Research Service and the General Accounting Office reviewed the program to determine its worth. Both the CRS and the GAO agreed that this is a valuable and needed program. In the words of GAO:

The sanctuaries program offers a unique Federal mechanism to focus on particular geographically defined marine areas and provide comprehensive regulation, planning and management . . . (it) provides environmental protection where 'gaps' exist in the coverage provided by other Federal regulatory authorities.

I believe the marine sanctuaries program is a valuable tool and is deserving of reauthorization. I look forward to the testimony today in order to identify possible steps for correcting what we all know are persisting administrative problems.

At this time I welcome the ranking minority member of this subcommittee, Mr. Pritchard, and I would recognize him and any other members for opening statements.

Mr. Pritchard?

Mr. PRITCHARD. Thank you, Mr. Chairman.

I believe that this program has much merit. It also has some problems. This committee will be examining those problems and seeing if it isn't possible—which I think it is—to make some adjustments in order for the program to continue. That is the purpose for these hearings and we will look forward to the witnesses testimony.

[Material follows:]

STATEMENT OF HON. JOEL PRITCHARD, A REPRESENTATIVE IN CONGRESS FROM THE
STATE OF WASHINGTON

I want to thank the witnesses who are testifying before us today. I am sure the information they will provide us will be useful to both of the subcommittees involved with the reauthorization of this program. I might also add that I am pleased that the Administration is supporting a three-year reauthorization of this program.

Title III of the MPRSA authorizes the Secretary of Commerce, with Presidential approval and Congressional review to designate ocean and Great Lakes waters as national marine sanctuaries for the purpose of preserving or restoring such areas for their conservation, recreational, ecological or aesthetic values (the program is administered by the Sanctuary Programs Division within NOAA).

The process for evaluating and designation areas as marine sanctuaries is one of the most open of all Federal resource management programs. Only six sanctuaries have been designated out of the many proposed since the program's inception ten years ago. I think that is a good indication of the time involved and the close scrutiny the sanctuaries come under prior to final designation.

However, the program has not been free from controversy. In the past, there have been difficulties with the ill-defined site selection process and the connotations brought about by the term "sanctuary". NOAA, in response to the aforementioned difficulties has redefined their site selection process; this hearing will give us the opportunity to examine and oversee this recently concluded process.

I look forward to hearing the testimony of the witnesses before us.

Mr. D'AMOURS. Mr. Anderson, do you have an opening statement?

Mr. ANDERSON. No, Mr. Chairman.

Mr. D'AMOURS. Mr. Forsythe?

Mr. FORSYTHE. Thank you, Mr. Chairman.

I also look forward to these hearings. It has been several years since the Subcommittees on Oceanography, and Fisheries and

Wildlife Conservation and the Environment, have had the opportunity to closely examine the marine sanctuaries program. Since the reauthorization hearings two years ago on title 3 of the Marine Protection, Research and Sanctuaries Act, significant steps have been taken by NOAA to refine the policy and administrative framework for continued operation of the program.

In response to controversy and confusion over the status, resource value, and size of previously proposed sanctuaries, NOAA instituted a new site selection process. The first phase of that process—site evaluation and identification by regional resource teams—was recently completed. NOAA is about to commence on the next stage—the selection of active candidates for possible designation.

Our hearings today are very timely. They allow us to learn more about the work of the regional teams as well as the ensuing stages in the sanctuary designation process.

Throughout its 10-year history, this relatively tiny program has come under a lot of fire. It remains the subject of controversy and debate. Much of the problem seems to stem from misinterpretations about its goals, focus, and intent. It is my hope that today's hearings will help the subcommittees address some of the outstanding issues, so that we can recommend changes to the marine sanctuaries program which will permit public and private use and enjoyment of our marine resources, while at the same time protecting those very valuable resources and the environment.

In conclusion, I want to add that I commend the administration for supporting a 3-year reauthorization of this program, and look forward to hearing from the administration and other witnesses before us today.

Thank you, Mr. Chairman.

Mr. D'AMOURS. Thank you, Mr. Forsythe.

None of the remaining members of the majority of the committee have an opening statement. I know that Mr. Young has a very short and very mild opening statement that he would like to make, and I will recognize him for that purpose at this time.

Mr. YOUNG. Thank you, Mr. Chairman.

I am pleased to see that this subcommittee has decided to take a careful look at the marine sanctuaries program as part of the reauthorization process this year. Based on the experience that we had in Alaska last year, this program needs either to be modified or deleted. I know you know that I have introduced legislation that would end the program completely. I hope that we can come to some agreement on changes and that the witnesses recognize that I am serious about deleting the whole program, but I do not wish to pursue that course if we can reach some agreements where the program is more acceptable to this Member of Congress.

I want to caution the members of this committee that the witness list today does not represent the full number of interested parties. In particular I am distressed that little attempt was made to provide full representation of the fishing industry. Only after my staff contacted the Oceanography Subcommittee staff was any attempt made to seek witnesses from the fishing industry. At that point, unfortunately, it was too late for fishermen to change their plans and come to Washington.

I note that we have one witness from New England who will testify on some fishing industry problems. However, with all respect to the witness, he is not a fisherman. I trust that members will review the written comments that will be received, as that seems to be the only way that the fishing industry will be able to comment.

I am also distressed that no witnesses representing the oil and gas industry in Alaska are here. I do not know if this is due to their not being invited or not being able to attend. However, Alaska is potentially the site for a large number of marine sanctuaries, and I think it is unfortunate that Alaskan witnesses are not here.

Again, Mr. Chairman, this program needs to be changed. I note that legislation is being prepared that will provide changes in direction that I think will be acceptable to me, to the marine industries, and I hope to the administration and the members of this committee. I suggest we give that legislation careful attention, and not simply reauthorize the Marine Sanctuary Act without amendments.

I want to compliment the members of this committee for recognizing—I believe each one of the opening statements says—that there should be some changes in the present bill as it has been established.

Mr. D'AMOURS. Mr. McKernan, do you have an opening statement?

Mr. McKERNAN. Yes, I do, Mr. Chairman. Thank you.

I want to state first of all that I was very pleased to learn that NOAA has finally dropped the Frenchman Bay, Maine site from its list of potential marine sanctuaries. Due to the amount of misinformation that circulated in that area of my State, the downeast fishermen believe that a marine sanctuary means another layer of fisheries management. I am convinced that their beliefs are justified because of some loose language that is contained within Title 3.

Although I believe that the marine sanctuary concept has many positive aspects, I feel that the initial phase of the site evaluation has been handled poorly in Maine—and I gather that that has been true in other parts of the country—and it has resulted in major opposition, at least to the Frenchman Bay site in Maine.

I would hope that this committee can tighten up the language in title 3, so that fishermen can be assured from the beginning of any future site evaluation process that their interests will be protected. Senator Cohen, who is the senior Senator from my State of Maine and a former member of this committee, has proposed language changes which I believe will help alleviate future opposition from fishermen, at least in Maine.

I propose that we also investigate a language change which will require the Secretary of Commerce to direct NOAA to confer, early in the site evaluation process, with the appropriate regional fishery management council in the region where a proposed site exists. In this way, not only will the fishermen's interests be considered early in the process, but unnecessary duplication of regulations can be avoided.

I further propose that language be included which will require the Secretary to consult with and give due consideration to the views of responsible State officials, including but not limited to the State fishery official. As has been mentioned earlier, Spencer Appolonio, who is the commissioner of our fisheries operation in Maine, is going to be testifying today and he can elaborate on some of the problems that we have had in Maine. We do, however, believe this program is one that ought to be continued.

I also think that we should require a broad outline of the types of regulations which may be expected within a marine sanctuary. As it stands now, regulations only become known after the draft designation document has been prepared.

Finally, I feel that the word sanctuary implies a wilderness area where no activities may take place. This has proved to be a red flag with the working watermen in my State, and perhaps a slight change in the title could prove a very effective way to reduce some of the opposition, at least of the type that has been expressed in Maine.

I believe by adopting these types of changes, we can allay the fishermen's fear of further bureaucratic involvement in their activities, and I feel we can foster their support for future programs.

Thank you, Mr. Chairman.

Mr. D'AMOURS. Thank you, Mr. McKernan.

Mr. PRITCHARD. Mr. Chairman?

Mr. D'AMOURS. Mr. Pritchard?

Mr. PRITCHARD. I just want to say that I think Congressman McKernan's and Senator Cohen's suggestions—which I think are in concert with each other—are reasonable. I think your concerns can be worked out and I think that it is possible for us to come to reach agreement which will satisfy you and the Senator. I think your suggestions are good. The committee will work with you to see if they can be incorporated.

Mr. Chairman, one other thing: Congressman Bateman cannot be here, and he would like to submit some questions for the record. I trust the committee will allow him to do that.

Mr. D'AMOURS. Yes. All opening statements will be allowed to be submitted for the record.

Mr. Breaux, the chairman of the Fisheries Subcommittee, has an opening statement.

Mr. BREAU. Thank you very much, Mr. Chairman.

I would ask unanimous consent that the opening statement that I have printed be made part of the record, and I will just summarize it.

Thank you Mr. Chairman. We look at marine sanctuaries as being extremely important. It is one program that our two subcommittees have jointly examined for a number of years.

The original idea, for those who may not have been here when Congress first passed the marine sanctuaries program, was to look out for special areas in the oceans that deserve special treatment and special protection, and I think everybody could agree with that. However, unfortunately, I feel that this administration and particularly the previous administration has lost track of what Congress was trying to do in providing for the establishment of marine sanctuaries.

We were looking at special, unique areas that needed some special attention. Unfortunately, some of the people in the beginning tried to make the marine sanctuaries program an ocean management tool. It was never intended to be an ocean management tool and, therefore, they started creating problems because they were trying to use this designation process to implement a whole, entire management apparatus, and it did not work.

We saw instances where thousands of square miles were proposed to be marine sanctuaries, and all sorts of activities were to be prohibited in those areas. Possibly that type of protection would have been useful, but it should not be accomplished through a marine sanctuaries type of program. We were looking at ways of protecting special areas that deserve special protection; not another management tool.

I think that the administration has gone a long way to correct many of the program's problems. Because of the input of this committee, and particularly our two subcommittees, the administration has made great progress in trying to streamline the process and make it work better.

I and my staff have prepared legislation which I will be introducing this morning which I would encourage other members of the subcommittee to take a serious look at. I think it is a better way of handling this process.

We do not let the administration—any administration—unilaterally designate national parks in this country. We do not let any administration unilaterally determine what national wildlife refuges are going to be established in this country. Congress does that. A marine sanctuary should be no different, so what my legislation basically does is to say that Congress, involving this subcommittee and this full committee, will be responsible for designating a marine sanctuary.

I strongly believe that is a better process. That is the way we handle other areas. We would receive recommendations from environmental groups, fishing groups, various industries and individuals regarding a formal proposal from the administration. It would allow these subcommittees to have a full hearing on an area that is to be designated as a marine sanctuary, and then afford it all the respect and all the protection that the marine sanctuary program can provide that particular area.

The only option we have now is to repeal what the administration does. They go ahead and designate it and then we have the great option of repealing it within 60 days. That is not how the program should be run. We should have the opportunity, like we do with national parks and wildlife refuges, to look at these areas, have testimony from the people that are going to be affected—fishing groups and citizens of the area—and then make a determination realistically whether it is something that Congress should do.

That is what my legislation would do, and I would urge that other members of the subcommittee look at it and see if they could consider joining as cosponsors.

Thank you, Mr. Chairman.

[Material follows:]

OPENING STATEMENT OF HON. JOHN B. BREAU, CHAIRMAN, SUBCOMMITTEE ON
FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT

Mr. Chairman, this morning our two subcommittees begin the process of reauthorizing Title III of the Marine, Protection, Research and Sanctuaries Act, commonly known as the Marine Sanctuaries Program. As originally enacted, the purpose of this program was to provide for resource management in those discrete marine areas which have unique conservation, recreational, ecological or aesthetic value. I emphasize the word discrete because since its inception in 1972, this potentially constructive program has been beset with controversy due to the misconception by the Executive Branch of our congressional intent.

By and large, it is fair to say that the early years of this program were characterized by an effort to convert the purpose of the legislation to a tool for comprehensive ocean management. This meant, in addition to the identification of large ocean areas for potential sanctuary designation, the concept that areas should be designated as sanctuaries for the purpose of restricting other ocean activities even though such other activities could be regulated through existing laws and regulations.

Although recently the object of regulatory revision, it is fair to assume that the lack of specificity in the existing statute and the absence of a mechanism to provide for positive Congressional input into the sanctuary designation process could well result in the continued deterioration and controversial nature of this program.

To address these problems, I will be introducing legislation amending the MPRSA to:

More clearly define marine sanctuaries and the objectives of the program and provide Congress with the primary authority to designate marine sanctuaries based on the recommendations of the Secretary of Commerce;

Provide all ocean resource user groups with equal access, through Congressional representation, to the process of resolving the level and nature of activities regulated within a sanctuary; and

Provide for greater Congressional oversight through separate sanctuary authorizations based on the individual merits, research and educational potential of each such sanctuary.

I look forward to today's testimony and working with you, Mr. Chairman, and other Members of our two subcommittees so that we might jointly refine this marine sanctuary program to one which is in full keeping with our original goals and purposes.

Mr. D'AMOURS. Thank you, Mr. Breau.

[The bill subsequently introduced follows:]

98TH CONGRESS
1ST SESSION

H. R. 2062

To amend title III of the Marine Protection, Research, and Sanctuaries Act of 1972.

IN THE HOUSE OF REPRESENTATIVES

MARCH 11, 1983

Mr. D'AMOURS (for himself and Mr. PRITCHARD) introduced the following bill;
which was referred to the Committee on Merchant Marine and Fisheries

A BILL

To amend title III of the Marine Protection, Research, and
Sanctuaries Act of 1972.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That title III of the Marine Protection; Research, and Sanc-
4 tuaries Act of 1972 (16 U.S.C. 1431 et seq.) is amended to
5 read as follows:

6 “TITLE III—NATIONAL MARINE SANCTUARIES

7 “SEC. 301. FINDINGS, PURPOSES, AND POLICIES.

8 “(a) FINDINGS.—The Congress finds that—

9 “(1) this Nation historically has recognized the
10 importance of protecting special areas of its public

1 lands, but such efforts have been directed almost exclu-
2 sively to land areas above the high water mark;

3 “(2) certain areas of the marine environment pos-
4 sess conservation, recreational, ecological, historical,
5 research, educational, or esthetic qualities which give
6 them special national or regional significance;

7 “(3) while the need to control the effects of par-
8 ticular activities has led to enactment of resource-spe-
9 cific legislation, these laws cannot provide a coordinat-
10 ed and comprehensive areawide approach to the man-
11 agement of special marine environments;

12 “(4) a Federal program which identifies and com-
13 prehensively manages special marine environments will
14 contribute positively to marine resource development
15 and conservation; and

16 “(5) such a Federal program will also serve to en-
17 hance public awareness, understanding, appreciation,
18 and wise use of the marine environment through public
19 educational, recreational, and research programs.

20 “(b) PURPOSES AND POLICIES.—The purposes and
21 policies of this title are—

22 “(1) to establish a system of national marine sanc-
23 tuaries, by identifying marine environments of special
24 significance due to their conservation, recreational,

1 ecological, historical, research, educational, or esthetic
2 value;

3 “(2) to provide authority for comprehensive
4 areawide management of these environments which
5 will complement existing regulatory authority in order
6 to protect or restore sanctuary resources;

7 “(3) to support, promote, and coordinate scientific
8 research on, and monitoring of, the conditions of sanc-
9 tuary resources, in order to expand scientific knowl-
10 edge of significant marine resources and improve man-
11 agement decisionmaking;

12 “(4) to enhance public awareness, understanding,
13 appreciation and wise use of the marine environment
14 through public interpretative and recreational pro-
15 grams; and

16 “(5) to facilitate, to the extent compatible with
17 the primary objective of resource protection, all public
18 and private uses of sanctuary resources not prohibited
19 pursuant to other authorities.

20 **“SEC. 302. DEFINITIONS.**

21 “Notwithstanding the provisions of subsection (h) of sec-
22 tion 3 of this Act, as used in this title—

23 “(1) The term ‘marine environment’ means—

24 “(A) the ocean waters and the continental
25 shelf over which the United States asserts juris-

1 diction for purposes of regulating living and non-
2 living marine resources; and

3 “(B) the Great Lakes and their connecting
4 waters.

5 “(2) The term ‘Secretary’ means the Secretary of
6 Commerce.

7 “(3) The term ‘State’ means any of the several
8 States or any territory or possession of the United
9 States which has a popularly elected Governor.

10 **“SEC. 303. SANCTUARY DESIGNATION STANDARDS.**

11 “(a) STANDARDS.—The Secretary, upon approval of the
12 President, may designate any area of the marine environment
13 as a national marine sanctuary if the Secretary determines
14 that such designation will fulfill the purposes and policies of
15 this title, and if the Secretary finds that—

16 “(1) the area is of special significance due to its
17 conservation, recreational, ecological, historical, re-
18 search, educational, or esthetic value;

19 “(2) existing State and Federal regulatory and
20 management authorities are inadequate to assure co-
21 ordinated and comprehensive management of the area,
22 including provisions for resource protection, scientific
23 research and public education, and that inclusion
24 within the system of national marine sanctuaries will
25 facilitate these objectives; and

1 “(3) the area is of a size and nature which indi-
2 cates that it will be amenable and responsive to the
3 comprehensive areawide management.

4 “(b) FACTORS AND CONSULTATIONS REQUIRED IN
5 MAKING FINDINGS.—For purposes of deciding whether or
6 not an area of the marine environment meets the standards
7 listed in subsection (a) (1), (2), and (3), the Secretary shall—

8 “(1) take into consideration—

9 “(A) the value of the area’s inherent natural
10 resource and ecological qualities; including its
11 contribution to biological productivity, mainte-
12 nance of ecosystem structure, maintenance of eco-
13 logically or commercially important or threatened
14 species or species assemblages, and the biogeo-
15 graphic representation of the site,

16 “(B) the area’s significance as a resource of
17 historical, cultural, archaeological, or paleonto-
18 logical value,

19 “(C) the present and potential human-use
20 values that are dependent on maintenance of the
21 area’s resources; including commercial and recre-
22 ational fishing, other recreational activities, and
23 research and educational opportunities,

1 “(D) present and potential activity impacts
2 that may adversely affect the resource qualities
3 identified in subparagraphs (A), (B), and (C),

4 “(E) the existing State and Federal regula-
5 tory and management authorities applicable to the
6 area and the ability or inability of those authori-
7 ties to fulfill the purposes and policies of this title,

8 “(F) the manageability of the area, including
9 such determining factors as its size, its ability to
10 be identified as a discrete ecological unit with de-
11 finable boundaries, its accessibility, and its suit-
12 ability for surveillance and enforcement, and

13 “(G) the public benefits to be derived from
14 sanctuary status, giving emphasis to the benefits
15 of long-term protection of commercially significant
16 resources, vital habitats and resources which gen-
17 erate tourism, to the negative impacts produced
18 by management restrictions on income generating
19 activities such as mineral development, and to the
20 socioeconomic effects of sanctuary designation;
21 and

22 “(2) consult with—

23 “(A) the Committee on Merchant Marine and
24 Fisheries in the House of Representatives and the

1 Committee on Commerce, Science, and Transpor-
2 tation in the Senate,

3 “(B) the Secretaries of State, Defense, and
4 Transportation, the Secretary of the Interior, the
5 Administrator, and the heads of other interested
6 Federal agencies,

7 “(C) the responsible officials of any State
8 that will be affected by the establishment of the
9 area as a national marine sanctuary, and

10 “(D) the appropriate officials of any Regional
11 Fishery Management Council established by sec-
12 tion 302 of the Magnuson Fishery Conservation
13 and Management Act of 1976 (16 U.S.C. 1852)
14 that may be affected by such designation, and

15 “(E) other interested persons.

16 **“SEC. 304. IMPLEMENTATION OF DESIGNATIONS.**

17 “(a) **DEFINITIONS.**—For purposes of this section—

18 “(1) The term ‘Congressional review period’
19 means, with respect to a sanctuary designation made
20 under subsection (b), the one hundred and twenty-day
21 period, beginning on the designation date of the sanctu-
22 ary, of continuous session of the Congress. In deter-
23 mining such one hundred and twenty-day period—

24 “(A) continuity of session is broken only by
25 an adjournment of Congress sine die; and

1 “(B) the days on which either House is not
2 in session because of an adjournment of more than
3 three days to a day certain are excluded.

4 “(2) The term ‘resolution of disapproval’ means—

5 “(A) if the designation of an area as a na-
6 tional marine sanctuary is to be disapproved a
7 concurrent resolution the matter after the resolv-
8 ing clause of which is as follows: ‘That the Con-
9 gress does not approve the national marine sanc-
10 tuary designation entitled that was
11 submitted to Congress by the Secretary of Com-
12 merce on .’, the first blank space
13 being filled with the title of the designation and
14 the second blank space being filled with the date
15 on which the notice was submitted to Congress;
16 or

17 “(B) if the designation of an area as a na-
18 tional marine sanctuary is not disapproved but one
19 or more terms of the designation are to be disap-
20 proved, a concurrent resolution the matter after
21 the resolving clause of which is as follows: ‘That
22 the Congress approves the national marine sanc-
23 tuary designation entitled that was
24 submitted to Congress by the Secretary of Com-
25 merce on , but disapproves the fol-

1 lowing terms of such designation: .',
2 the first blank space being filled with the title of
3 the designation, the second blank space being
4 filled with the date on which the notice was sub-
5 mitted to Congress, and the third blank space
6 being filled with the text of each term of the des-
7 ignation which is disapproved.

8 “(b) DESIGNATION PROCEDURES.—(1) An area of the
9 marine environment shall be considered to be designated as a
10 national marine sanctuary if, on the same day (hereinafter
11 referred to as the ‘designation date’), the Secretary—

12 “(A) publishes in the Federal Register notice of
13 such designation, appropriately titled, together with the
14 terms of the designation; and

15 “(B) submits to each House of Congress a copy of
16 such notice and terms together with—

17 “(i) an analysis of the findings made with re-
18 spect to the designated area under section 303(a);

19 “(ii) proposed mechanisms to coordinate ex-
20 isting regulatory and management authorities
21 within such area;

22 “(iii) a management plan detailing goals and
23 objectives, management responsibilities, resource
24 studies, interpretive and educational programs,

1 and enforcement and surveillance activities for
2 such area;

3 “(iv) draft regulations which will be proposed
4 for adoption under section 305(1); and

5 “(v) an estimate of annual management costs
6 of such area, including costs of personnel, equip-
7 ment and facilities, enforcement, research, and
8 public education.

9 “(2) The terms of a designation shall include, among
10 other things, the geographic area included within the pro-
11 posed sanctuary, the characteristics of the area that give it
12 conservation, recreational, ecological, or esthetic value, and
13 the types of activities that will be subject to regulation by the
14 Secretary in order to protect those characteristics.

15 “(c) **TAKING EFFECT OF DESIGNATIONS.**—The desig-
16 nation of a national marine sanctuary under subsection (b)
17 shall take effect after the closing date of the congressional
18 review period unless—

19 “(1) the Congress disapproves the designation by
20 adopting a resolution of disapproval described in sub-
21 section (a)(2)(A) before the close of the congressional
22 review period;

23 “(2) in the case of a designated area that is locat-
24 ed entirely within the waters over which one or more
25 States have jurisdiction, the Governor of the State, or

1 the Governors of each of such States, as the case may
2 be, certify to the Secretary, within the sixty-day period
3 beginning on the designation date of the sanctuary,
4 that the designation is unacceptable to the State; or

5 “(3) the Secretary withdraws the designation
6 under subsection (d)(3).

7 “(d) DISAPPROVAL OF TERMS OF DESIGNATION.—(1)
8 No term of a designation that is submitted to the Congress
9 under subsection (b)(1)(B) shall take effect if the Congress
10 disapproves the term by adopting a resolution of disapproval
11 described in subsection (a)(2)(B), for such term, before the
12 close of the congressional review period.

13 “(2) A term of designation shall not take effect within
14 any portion of a national marine sanctuary that is within the
15 jurisdiction of a State if the Governor of the State certifies to
16 the Secretary, within the sixty-day period beginning on the
17 designation date of the sanctuary, that the application of such
18 term within such portion is unacceptable to the State.

19 “(3) If the Secretary considers that action taken under
20 paragraph (1) or (2), or both, will affect the designated area
21 in such a manner that the purposes and policies of this title
22 cannot be fulfilled within such area, the Secretary may with-
23 draw the designation.

24 “(e) PUBLICATION UPON TAKING EFFECT.—The Sec-
25 retary shall publish in the Federal Register the designation of

1 each national marine sanctuary that takes effect under this
2 title, together with the terms of the designation that are
3 effective.

4 **"SEC. 305. REGULATIONS AND NEGOTIATIONS.**

5 "With respect to each designation of a national marine
6 sanctuary that takes effect under section 304—

7 "(1) the Secretary, after consultation with other
8 interested Federal and State agencies, shall issue nec-
9 essary and reasonable regulations to implement the
10 terms of the designation and control the activities de-
11 scribed in it, except that all permits, licenses, and
12 other authorizations issued under any other authority
13 that pertain to activities carried out within the sanctu-
14 ary shall be valid unless such regulations otherwise
15 provide; and

16 "(2) the Secretary of State, if the sanctuary in-
17 cludes an area of water beyond the territorial jurisdic-
18 tion of the United States, shall take such action as
19 may be appropriate to enter into negotiations with
20 other Governments for the purpose of arriving at nec-
21 essary arrangements with those Governments for the
22 protection of the sanctuary and to promote the pur-
23 poses for which it was established.

1 **"SEC. 306. RESEARCH.**

2 "The Secretary shall conduct such research and educa-
3 tional programs as are necessary and reasonable to carry out
4 the purposes and policies of this Act.

5 **"SEC. 307. ANNUAL REPORT ON AREAS BEING CONSIDERED**
6 **FOR DESIGNATION.**

7 "The Secretary shall submit a report to the Congress on
8 or before November 1 of each year, setting forth information
9 on those sites which the Secretary will be actively consider-
10 ing for sanctuary designation in the current fiscal year. Such
11 information for each site shall include, to the extent available
12 at time of submission, the following:

13 "(1) A description of the resources and other
14 values which makes the site nationally significant.

15 "(2) Present and potential human uses.

16 "(3) Impacts of present and potential activities.

17 "(4) Existing State and Federal regulatory and
18 management authorities.

19 "(5) Boundary options.

20 "(6) Regulatory options.

21 "(7) Potential research and educational benefits.

22 **"SEC. 308. ENFORCEMENT.**

23 "(a) **IN GENERAL.**—The Secretary and the Secretary of
24 the department in which the Coast Guard is operating shall
25 conduct such enforcement activities as are necessary and rea-
26 sonable to carry out this title. The Secretary shall, whenever

1 appropriate and in consultation with the Secretary of the de-
2 partment in which the Coast Guard is operating, utilize by
3 agreement the personnel, services, and facilities of other Fed-
4 eral departments, agencies, and instrumentalities, or State
5 agencies or instrumentalities, whether on a reimbursable or
6 nonreimbursable basis in carrying out his responsibilities
7 under this title.

8 “(b) CIVIL PENALTIES.—(1) Any person subject to the
9 jurisdiction of the United States who violates any regulation
10 issued under this title shall be liable to a civil penalty of not
11 more than \$50,000 for each such violation, to be assessed by
12 the Secretary. Each day of a continuing violation shall con-
13 stitute a separate violation.

14 “(2) No penalty shall be assessed under this subsection
15 until the person charged has been given notice and an oppor-
16 tunity to be heard. Upon failure of the offending party to pay
17 an assessed penalty, the Attorney General, at the request of
18 the Secretary, shall commence action in the appropriate dis-
19 trict court of the United States to collect the penalty and to
20 seek such other relief as may be appropriate.

21 “(3) A vessel used in the violation of a regulation issued
22 under this title shall be liable in rem for any civil penalty
23 assessed for such violation and may be proceeded against in
24 any district court of the United States having jurisdiction
25 thereof.

7 "SEC. 309. AUTHORIZATION OF APPROPRIATIONS.

10 “(1) \$2,264,000 for fiscal year 1984.

11 “(2) \$2,500,000 for fiscal year 1985.

12 “(3) \$2,750,000 for fiscal year 1986.”.

—Mr. D'AMOURS. Before we call the first witness, I do want to state for the record, in response to Mr. Young's statement, that this Subcommittee has always taken great pains to invite representatives from all interested parties relative to legislation in the hearings this committee has held.

Staff informs me that we did, in fact, invite the Alaskan Oil and Gas Association to testify. We spoke to Bill Hopkins on that question, and they did not wish to do so. We did contact the Alaskan fishing industry in January and asked them if they would like to be here to testify.

I regret that there might have been some misunderstanding or breakdown in communications, but I would hope that in the future when any member of this subcommittee or of the full committee feels aggrieved by his or her inability to bring witnesses before this committee, that they would contact the chairman—myself in this case—and I would be very happy to work out any misunderstandings or any problems that might have occurred. This is the first I have heard that there was any problem. However, as I say, we have always taken great pains, I think the records show, to have everyone here.

Mr. YOUNG. Will the gentleman yield?

Mr. D'AMOURS. Of course, I would yield to the gentleman from Alaska.

Mr. YOUNG. In the opening statement I said I did not know whether you had invited the oil companies or not, and I will address Mr. Hopkins for not being here.

Second, just out of curiosity, who did we address, who did you invite from the fishing industry from Alaska?

Mr. D'AMOURS. Lucy Sloan from the National Federation of Fishermen.

Mr. YOUNG. Well, that is not necessarily representing the State of Alaska.

Mr. D'AMOURS [continuing]. Is the person that was contacted, and they of course represent Alaskan fishing as they do national fishing interest.

Mr. YOUNG. That is not true.

Mr. D'AMOURS. However, if there was a problem, I regret that this breakdown in communications occurred and I would hope in the future that any such problems would be called to the Chair's attention. I can assure any members that I would seek to rectify them very quickly.

Mr. YOUNG. I appreciate the chairman's generosity. One thing, Mr. Chairman, the reason I am deeply concerned, there was last year proposed 10 sites—and my question will follow up on this—and actually suggested 20 sites, which is more than any other area in the United States. It bothers me. That is why I have introduced the bill to eliminate this whole program.

Mr. D'AMOURS. I would say to the gentleman from Alaska that I think that his problems in that regard are well taken, and I do think that there was a breakdown in the system in the Alaskan situation. I am hopeful that these hearings will address those problems and allow us to avoid them in the future.

Our first witness is Mr. Peter Tweedt, Acting Director, Office of Ocean and Coastal Resources Management of NOAA and Depart-

ment of Commerce, accompanied by persons whom I will allow him to introduce when they get to the table.

STATEMENT OF PETER TWEEDT, ACTING DIRECTOR, OFFICE OF OCEAN AND COASTAL RESOURCES MANAGEMENT, DEPARTMENT OF COMMERCE, ACCOMPANIED BY DR. NANCY FOSTER, CHIEF, MARINE SANCTUARIES PROGRAM; JACK ARCHER, OFFICE OF GENERAL COUNSEL; DR. THOMAS BRIGHT, LEADER, GULF REGION RESOURCE EVALUATION TEAM; DR. MAURICE LYNCH, LEADER, NORTH ATLANTIC REGION RESOURCE EVALUATION TEAM; AND WAYNE C. SAVAGE, PRESIDENT, CHELSEA INTERNATIONAL CORP.

Mr. TWEEDT. Good morning, Mr. Chairman, members of the committee.

I am Peter Tweedt from NOAA, and I have with me Dr. Nancy Foster, who is the chief of the sanctuaries program in NOAA; Mr. Jack Archer, who is with the NOAA General Counsel office; and at the request of the subcommittee, Mr. Chairman, we have Mr. Wayne Savage from the Chelsea Corp., which was a contractor with NOAA, on the end; Dr. Mo Lynch from the Virginia Institute of Marine Science, next to Mr. Archer; and Dr. Tom Bright from Texas A & M, on the end of the table. These gentlemen that you invited, the two doctors, are subcontractors with Chelsea and headed two of the regional site evaluation teams.

Mr. Chairman, if I may I will summarize the statement that we submitted but first touch on the six sanctuaries that are currently in business: the U.S.S. *Monitor* off Cape Hatteras in North Carolina; the Key Largo sanctuary in the Florida Keys; two sanctuaries in California, the Cannel Islands and the Point Reyes-Farallon sanctuaries; the Looe Key national sanctuary, also in Florida; and the sixth is the Gray's Reef sanctuary east of the Sapelo Islands in Georgia.

We also have three active candidates for sanctuary designation. The first is an outstanding area of coral reefs, mangroves, and sea turtles, in the La Parguera area off southwest Puerto Rico. The second is the humpback whale wintering grounds off Hawaii; and the third is a unique deepwater terrace formation in Fagatele Bay, American Samoa.

Two years ago the administration appeared before your committee and offered some refinements to the operational policy and procedures that we would follow in the sanctuary program. We did two things: We proposed to revise the regulations, and in September 1982 NOAA published revised regulations. The revisions focused on changes in site identification and selection criteria and in the formation of site-specific management plans. The final regulations, taking into consideration these two factors, should be appearing in the Federal Register within the next month.

As to the management plans, they have become an integral part of the designation process. All three proposals that I just previously mentioned—Puerto Rico, Hawaii, and American Samoa—are being prepared in this manner.

The approach will give local and State interests a greater role earlier in the process in the full range of sanctuary issues. It

should also provide a more complete analysis of the implications of a sanctuary designation, allowing the public to assess the potential costs and benefits of the sanctuary, and it further assures that the management of a site will begin at the time the site is designated rather than waiting for a year or more while a management plan is being completed. This will add a longer time to the designation process. We feel it is worth the effort, primarily because of the increased opportunity for public involvement.

Let me now address the site evaluation process. As the chairman very well paraphrased, I think, we encountered problems with the earlier process, which was a list of recommended areas. We have replaced that list with a site evaluation process. We have had some problems, and I will mention those in a minute.

The list of recommended areas really had criteria that were too broad and allowed for marginally acceptable nominations to qualify. There were a great many nominations received. Many were just minimally acceptable and, as Mr. Breaux pointed out, in some instances they incorporated extremely large areas. Examples would be the Gulf of Alaska, Georges Bank, Puget Sound.

This caused substantial confusion and concern over the status of the sites on the list and the likelihood of what further action would happen. We have replaced that with the site evaluation list. It sought to identify high-quality sites, have more public involvement, and list sites that could then be further evaluated. We are now in the final stages of implementing that process and have a list ready to submit to the Federal Register of sites that will be on the site evaluation list.

The process was built around eight regional teams. They were roughly delineated along the boundaries of the regional fisheries management councils. Each team consisted of between two to four scientists with research experience in the marine resources of that geographic area. The purpose of the teams was to identify and evaluate marine sites that they could then recommend to NOAA, that had potential as sanctuaries, that would then go into the next stage of the sanctuary designation process.

The process was lengthy. It involved public participation that began with Administrator Byrne sending the Governors of each of the coastal States a letter explaining the process, asking that the Governor designate a liaison at the State level to work with us. We then developed mailing lists to send to each of the affected areas soliciting comments, asking if there were further nominations, and we attempted to insure that—and I think the key word there is “attempted”—we attempted in every way to insure that these mailing lists were complete and that we contacted private groups, public interest groups, and concerned commercial groups.

Each of the eight teams met early in 1982 and identified sites that they considered to have potential. The descriptions of each were prepared and these were sent out on the mailing list. The regional teams, after reviewing the various sites and considering the comments that were received, were to recommend and did recommend a maximum of five sites per region.

I think that largely the process worked. The sites on the proposed LAS are a vast improvement over the sites on the previous lists. They have ecological resource values that are documented

more thoroughly, and the size of the sites are smaller in almost all cases than those on the LRA. Sites that appear in State waters will only do so with the concurrence of the Governor of the affected State.

We did have some problems, as you are all aware. The problems were the responsibility of NOAA and the way we handled the process, and I think they really boiled down to two things. The mailing lists that we used were not as adequate in some cases as they might have been, and therefore comment was not sought from many people who had a very valid and real interest in the particular area that we were seeking comments on.

Second, we did not make it clear, as clear as we should have to the public, what the process involved. In many cases the first that a citizen in a given area knew about it, was when he saw a headline in the paper, "U.S. Government To Name 15 Marine Sanctuaries Off Your Shores." One can certainly understand the concerns of the citizens in a given area.

This is what happened in Alaska. The team had 18 sites, which was far larger than the criteria that were set about in coming up with a list. However, the sites that would have finally boiled down would have been the five that all the teams were working toward.

We received a number of comments, a number of expressions of concern from citizens in Alaska, from the Alaska delegation, from business interests. We did a couple of things to try to relieve the problem. We extended the public comment period. We sent NOAA officials to Alaska and they held a series of public meetings to gather citizens' views.

At the end of that process we made the decision to terminate the site evaluation process in Alaska, so there are no Alaska sites on the list that we are about to submit to the Federal Register. That list will be the shopping list for NOAA to work from and consider sanctuaries for the next 5 to 10 years. Each site that we select from that list will become an active candidate, and it will go through a lengthy designation process that will have extensive analysis and public review. The effect will be that many sites that are on the SEL will undoubtedly not ever be designated sanctuaries.

The administration believes that the program refinements that we instituted during the last 2 years have been successful because they have been more positive, and I think a key thing is that they have had a predictable path for the future of sanctuary designations. We have tried to balance the many interests and concerns while bearing in mind the basic mission given to NOAA by Congress.

In conclusion, the administration supports the reauthorization of title 3 of the Marine Sanctuaries and Protection Act for another 3 years.

Thank you, Mr. Chairman.

[Material follows:]

PREPARED STATEMENT OF PETER TWEEDT, NATIONAL OCEANIC AND ATMOSPHERIC
ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Mr. Chariman and members of the committee, Approximately two years ago, our agency appeared before this Committee to discuss reauthorization of Title III of the Marine Protection, Research and Sanctuaries Act of 1972. In the past two years sig-

nificant steps have been taken to refine the operational aspects of the program, implement management of existing sanctuaries and evaluate proposed additions to the national system. I am pleased to be here today to testify again on the reauthorization of the program.

I will first provide some background on the purpose of the program and its status, and then highlight the program's activities during the past two years and our refinements in program management.

GOALS OF THE NATIONAL MARINE SANCTUARY PROGRAM

To enhance resource protection through the implementation of comprehensive, long-term management plans tailored to the resources of special marine areas;

To promote and coordinate research to expand scientific knowledge of significant marine resources to improve management decisionmaking in Marine Sanctuaries;

To enhance public awareness, understanding, and wise use of the marine environment through public educational and recreational programs; and

To provide maximum public and private use of special marine areas.

With these goals in mind, I will summarize the current status of the program.

There are currently six marine sanctuaries:

The Monitor National Marine Sanctuary—This sanctuary serves to protect the wreck of the Civil War ironclad, U.S.S. *Monitor*. It was designated in January 1975 and is an area one mile in diameter southeast of Cape Hatteras, North Carolina.

The Key Largo Coral Reef National Marine Sanctuary—This sanctuary, off the Florida Keys, designated in December 1975, provides protective management for 100 square miles of the largest concentration of coral reefs in the continental U.S.

The Channel Islands National Marine Sanctuary—This, the largest sanctuary, designated in September 1980, includes approximately 1,250 nautical square miles of State and Federal waters off the coast of California adjacent to the northern Channel Islands and Santa Barbara Island. The sanctuary protects habitats for marine mammals and seabirds.

The Looe Key National Marine Sanctuary—The sanctuary consists of a five nautical square mile submerged section of the Florida reef tract southwest of Big Pine Key. The site includes a "spur and groove" coral formation supporting a diverse marine community and a wide variety of human uses. It was designated in January 1981.

The Gray's Reef National Marine Sanctuary—This site, designated in January 1981, is a submerged live bottom area located on the South Atlantic continental shelf due east of Sapelo Island, Georgia. The sanctuary, which encompasses about 17 nautical square miles, protects a productive and unusual habitat for a wide variety of species including corals, tropical fish and sea turtles.

The Point Reyes—Farallon Islands National Marine Sanctuary—This sanctuary, designated in January 1981, includes approximately 940 nautical square miles of State and Federal waters off the California coast north of San Francisco and contains a diverse array of marine mammals and marine birds, as well as fishery, plant and benthic resources.

In addition to the 6 designated sites we have 3 active candidates: outstanding coral reefs, mangroves, and sea turtles in La Parguera, off Southwest Puerto Rico, Humpback Whale wintering grounds off Hawaii and unique deep water terrace formations in Fagatele Bay, in American Samoa. The La Parguera and Fagatele Bay sites are scheduled to be considered for designation this fiscal year and Hawaii in early FY 1984.

B. REVIEW OF REFINEMENTS TO IMPLEMENTATION OF TITLE III

Two years ago when the Administration appeared before this Committee, a number of refinements to operational policy and procedure were outlined. I would like to review progress, to date, in implementing these refinements.

1. *Proposed revised program regulations.*—In September 1982 NOAA published revised regulations for continued implementation of the National Marine Sanctuary Program. The revisions focused on changes in the site identification and selection criteria, which I will discuss at length later, and components of our site-specific management plans. Final regulations, taking into consideration all public comments, should be appearing in the Federal Register within the next month.

2. *Management plans.*—Development of the Management Plan has become an integral part of the designation process. All three proposals—Puerto Rico, Hawaii, American Samoa—are being prepared in this manner, and substantial progress has been made in creating management plans for already designated sites. This approach give local/State interests a greater role, earlier in the process, in the full

range of sanctuary issues. It also provides for a more complete analysis of the implications of sanctuary designation thereby allowing the public to assess potential costs and benefits. It further insures that management for the site will begin at the time of designation and not languish for a year or more while a Management Plan is being completed. While this has added nearly a full year to the designation process, we feel it is well worth the effort because of the increased opportunity for public involvement, and full discussion prior to designation, of all aspects of sanctuary operation.

3. Site evaluation list.—The other key change is the elimination of the List of Recommended Areas (LRA) and its replacement with the Site Evaluation List (SEL). This new listing process has not been without its problems as I will discuss later. As many of you are aware, program regulations published on July 31, 1979 (44 FR 44531), established the LRA as a means of advising the public of recommended sites, cataloging potentially significant marine sites, and soliciting information on those sites. The LRA, however, did not totally fulfill these purposes. Since LRA site evaluation criteria were broad and allowed marginally acceptable nominations to qualify for further consideration, the procedure resulted in unnecessary controversy over the Program as a whole. A great number of nominations were received, many of which were minimally acceptable, in some instances incorporating large areas of the ocean and encompassing thousands of square miles, examples of which were the Gulf of Alaska, Georges Bank, and Puget Sound. This caused substantial confusion and concern over the status of sites on the LRA and the likelihood of further action. Even though the majority of the listed sites would never become active candidates, the LRA has often been perceived as a blueprint for the national marine sanctuary program.

Both our Program Development Plan (PDP) distributed in January 1982 and our draft program regulations published September 7, 1982, proposed eliminating this system and replacing it with one that would result in identifying higher quality sites, and limiting both the size and number of sites eligible for marine sanctuary status. This new Site Evaluation List (SEL) process was intended to provide for more public involvement in the listing of sites for further evaluation. With the LRA process, no one except the nominator, NOAA, and readers of the Federal Register knew that a site had been nominated and placed on the LRA. It was our hope to insure broader awareness that sites were going on a list for further evaluation and to provide interested groups and the public with an early opportunity to provide input. We are now in the final stages of implementing the SEL process and have prepared a proposed list of sites to be published in the FEDERAL REGISTER and distributed to our mailing list. I anticipate that the proposed SEL will appear in the Federal Register either today or tomorrow. I have an advance copy with me today which I will make available to the committee. At this point I would like to review and summarize the SEL process to this point.

The SEL process entailed establishment of eight regional teams, roughly delineated along the boundaries of the regional Fishery Management Councils. The teams are Western Pacific, Eastern Pacific, Alaska, Gulf of Mexico, South Atlantic, North Atlantic, Great Lakes and Caribbean. Each team consisted of between 2 to 4 scientists with research experience in the marine resources of their region. The purpose of the teams was to identify and evaluate marine sites in accordance with site identification criteria (developed as part of the PDP). In addition, the teams were to recommend to NOAA which sites had potential as marine sanctuaries based upon the natural resource values of the sites.

In February 1982, NOAA contracted with Chelsea International Corporation to organize and oversee the preliminary stages of implementing the SEL process.

The process has been lengthy and has involved extensive public participation efforts. On April 22, 1982, a letter from Administrator Byrne was sent to Governors of coastal states explaining the process and requesting a liaison at the States level. This was followed by meetings with the State liaison and leaders of key user groups.

An important aspect of this public participation effort was the compilation of mailing lists. To this end, state liaisons, coastal zone management contacts, team members, and a broad range of national groups were solicited for names. Initial lists were drafted and sent to State liaison and CZM offices for review and comment. We attempted to insure that the final mailing lists included appropriate individuals, groups, and government agencies.

Each of the eight teams met in early 1982 and identified sites considered "potential" marine sanctuary sites. Descriptions of each were prepared and sent to those on the mailing list, local organizations and Federal agencies for a 45 day comment and review period. Reviewers were also provided with 75 days in which to submit additional nominations. Public information meetings were held by NOAA staff,

team members and Chelsea upon request. There was a second round of team meetings and finally, in mid-February 1982, the regional teams recommended a maximum of 5 sites per region to NOAA. Based on public review and comment and recommendations by the regional teams, NOAA has established a proposed site evaluation list which will have a 90 day public review period.

C. HOW HAS THE PROCESS WORKED

I would now like to say a few words about how successful the process has been.

Sites on NOAA's proposed SEL are a vast improvement over the LRA: ecological resource values are documented more thoroughly; sizes of sites are smaller than most on the LRA, in line with our policy of keeping sanctuaries manageable, discrete units; more public interaction has occurred, therefore we are more knowledgeable about each site; no site appears in State waters where the Governor objects to placement on the list and, in several instances, gubernatorial support has been expressly stated.

Not all of the sites on the proposed SEL will become sanctuaries, but the number of sites on the list and the quality of sites is far more in line with administration policies for the program. In general, the SEL process has worked.

However, some problems were encountered:

Mailing lists were not inclusive of all those who are interested in the process.

Gross misconceptions of the intent of the SEL process were evident in some regions; e.g., in some areas it was not made clear to the public that sites were being proposed for replacement on the list for future evaluation rather than for designation.

Lack of familiarity with the program led to fear that activities such as commercial fishing would be shut down. In these instances the dictionary definition of "sanctuary" as an area of refuge or asylum contributed to such concerns.

These kinds of problems were especially severe in Alaska and eventually led to the termination of the SEL process in that region. Specifically, the Team had 18 sites on its preliminary list, (about twice the number for other regions) and to further exacerbate that problem several were exceptionally large, contrary to NOAA's policy on size. The fact that no more than 5 of those sites would ever be recommended to NOAA, and that NOAA has a policy regarding size of sites was not effectively communicated to the public until too late in the process. The widespread impression was that the public comment period was to resolve the issue of whether these sites would be designated, not whether the sites were suitable for placement on the SEL. Although NOAA extended the public comment period and conducted a series of public information meetings in Alaska, public reaction had so solidified that NOAA terminated further consideration of adding any Alaska sites to the SEL. This means that the final SEL will contain no Alaska sites, and therefore, no further effort will be made in Alaska for several years while NOAA completes its evaluation of all sites on the SEL.

As mentioned previously, NOAA has been very responsive to the views of State governments, especially in cases where Team recommendations have involved State waters. That is not to say that because a State supports placement of a site on the SEL or eventually may support designation that a State-water site will automatically be recommended for designation by NOAA. In all cases, but particularly those involving State waters, we must determine that there is a national interest to be served in designating the area as a National Marine Sanctuary. At this point once a site is on the SEL a decision whether to move it to the Active Candidate stage involves consideration of factors in addition to its intrinsic high natural resource and human use values. Several factors are considered in this decision including whether resources are subject to existing or potential threats.

The lengthy designation process and the extensive analysis and public review no doubt mean that many sites on the final SEL will be eliminated at some point during the evaluation phase and will never be designated marine sanctuaries.

While recognizing the resource values a given site, we may determine that there are no substantial net benefits to the Nation to be gained from sanctuary status. To reiterate, these determinations are made as part of an extensive, cooperative evaluation effort involving Federal agencies, State and local government and the many users of marine resources in the area. The process for evaluating and designating areas as National Marine Sanctuaries is one of the most open and interactive of all Federal resource management programs. The fact that only six designations have been made during the first 10 years of program operation in part exemplifies the care and rigor of the designation process.

The Administration believes that program refinements instituted during the last two years have been successful in providing a more positive, predictable path for future sanctuary designations. We are working to minimize the level of controversy that sometimes accompanies sanctuary designations. We have tried to balance the many interests and concerns while bearing in mind the basic mission given us by the Congress. On balance, I think we have done a good job and the program refinements we are preparing will further improve our ability to serve the intent of this law.

In conclusion, and for the aforementioned reasons, the Administration supports reauthorization of Title III of the Marine Protection, Research and Sanctuaries Act of 1972 for another three years at a level of such sums as may be necessary to fund the activities herein delineated.

Mr. D'AMOURS. Thank you, Mr. Tweedt.

I just want to announce to the subcommittee members, particularly the new subcommittee members, that during the question and answer period we are going to adhere very strictly to the 5-minute rule, and that includes both questions and answers, in order to give those people down the line a fair chance to question witness.

Mr. Tweedt, given the past experience that NOAA has had with the old site evaluation procedure, how did we fall into that same trap again in Alaska this time around? I mean, we had been there before. The earlier process contained all of the faults and problems that we experienced again in Alaska. How did that occur, given the prior experience, and how in blazes are we going to evolve some way to avoid the misunderstanding, the evaluation of overly large tracts, and all of the attendant problems? How are we going to prevent that, and why couldn't we do it in this case, given our past negative experience?

Mr. TWEEDT. I think there were probably two major factors, Mr. Chairman. One I already touched on was, we did not do our job as well as we should have in Alaska.

Second, the previous process had gone through and one of the limiting things in the previous process was, unless you were a reader of the Federal Register, you might not likely know that some of these sites were even on a list. That list was 79 sites long; some of them were big. It in many cases did not get that much public attention. This did, because it was a more formal process. We had a team of local people, scientists from Alaska or in any of the other regions, working.

Therefore, what it did was, it focused attention all at once on an entire area. The second thing where we fell down was that the sites were announced in the press and it appeared that there were, in the case of Alaska, one could assume that there were going to immediately be 18 sanctuaries up there. That was a failure on our part in communication. Second, as I say, it was the fact that everything was focused at once. It was not only in Alaska; we had similar instances in other parts of the country, too.

Mr. D'AMOURS. Because of that situation, it will undoubtedly be, several years before any site could be considered again, I would assume, in Alaska.

Mr. TWEEDT. Yes, that is correct.

Mr. D'AMOURS. What are you going to do to avoid this? Has anybody implemented any kind of a system that is going to avoid these errors in the future, in Alaska or elsewhere?

Mr. TWEEDT. Certainly, yes, I think we have learned a great deal. The SEL was the first attempt at doing it in a more organized pro-

cedure. In the previous system anyone could nominate a site with really very few criteria. You could have a Governor nominating a site or you could have a Cub Scout troop nominating a site. They all got on the list in the same ranking, in effect.

This way, we tried to start with scientists who were familiar with the ecology and the resources of a given area.

In the future, if future SEL teams are formed, perhaps they should have representatives of other disciplines—economic interests, as an example.

Mr. D'AMOURS. Is it largely a problem of communications or is it largely a problem of public perception? Is that what you are telling us?

Mr. TWEEDT. No. I am telling you in Alaska I think that was the case.

Mr. D'AMOURS. What can you do about that?

Mr. TWEEDT. In any system the public perception of the program would have to be—in any case we would have to do a better job of letting the public know what we were up to a little earlier in the process.

Mr. D'AMOURS. Is any procedure going to be implemented to accomplish that?

Mr. TWEEDT. Well, the site evaluation list that we have now will keep us busy for about 5 to 10 years, so we have not addressed a new site evaluation list procedure at this time.

Mr. D'AMOURS. Therefore, the problem is going to come again 5 or 10 years down the road. We are going to start over from ground zero and be in this room again, with other people most probably, asking the same questions and wondering what we could have done to avoid the unnecessary confusion?

Mr. TWEEDT. No. I certainly think that both NOAA and the Congress would be giving us some suggestions long before then. I do not think that 10 years from now whoever is in the sanctuaries program would not profit by the 2 previous procedures that were employed.

Mr. D'AMOURS. Well, I would feel a lot better if I thought NOAA was doing something or beginning to implement something that might be relied upon by future administrators.

My time has expired, and I will now recognize Mr. Pritchard.

Mr. PRITCHARD. Mr. Chairman, there are a number of people here that are very anxious for questions, so I will pass at this time.

Mr. D'AMOURS. Mr. Forsythe?

Mr. FORSYTHE. Thank you, Mr. Chairman. I will have a few questions.

When a national marine sanctuary encompasses State waters, how are the State and Federal jurisdictional and cost-sharing issues with regard to management, surveillance, and enforcement, research, education for the sites worked out? How do you work with the States when a sanctuary encompasses both State and Federal waters?

Mr. TWEEDT. There are two sanctuaries of the current six that include State waters, the two in California. We have cooperative agreements with the State of California. They use some of their State people to help enforce the regulations of the sanctuary. They receive some funding from NOAA to carry that out.

In the case of some of the other sanctuaries—the Monitor in North Carolina—the State does some of the monitoring as more of a contractor than on a cooperative agreement.

Mr. FORSYTHE. Therefore agreements are worked out with the State, with full acceptance by the State of their share of the responsibility. It is not something that is just loaded on them.

Mr. TWEEDT. Yes. Any sanctuary that would be in State waters would need the concurrence of the Governor of the State to begin with.

Mr. FORSYTHE. With regard to existing sanctuaries, would you describe the fishing-related regulations in effect and also the response of the local fishing community to these regulations and to the sanctuaries in their areas?

Mr. TWEEDT. Several of the sanctuaries prohibit specific kinds of fishing activities—wire fish netting, trawling, spearfishing—but they are specifically aimed at a method of fishing and not fishing in general.

Mr. FORSYTHE. Have these regulations been relatively accepted by the fisheries in those areas?

Mr. TWEEDT. My experience would be for the past year, and to my knowledge in the current six existing sanctuaries they are accepted by the fishing industry.

Mr. FORSYTHE. You have one recent case, I know, with regard to enforcement of sanctuary regulations. That was the Looe Key incident involving damage to the coral reef by two commercial shrimp-imp boats. I understand penalties were assessed but were being contested. Has this case been resolved, and what was the outcome?

Mr. TWEEDT. The case has been resolved. There were penalties assessed on the captain of the boat and the owner of the boat. This was a case of a fishing boat that ran aground in the sanctuary and the captain tried to get the boat off, damaging the coral, before outside help could come that would have probably made it possible for him to get his fishing boat off without damaging the coral.

The captain was fined. He did not appeal his fine so he does owe the Government a \$5,000 fine. The boatowner appealed his fine, which was also \$5,000, and he paid \$3,500 and has a \$1,500 amount held in escrow for the next 2 years if he does not have any further problems.

Mr. FORSYTHE. This, then, really was not a use of gear. As you say, he ran aground.

Mr. TWEEDT. Yes, sir.

Mr. FORSYTHE. Would you highlight the research and education programs which have been undertaken during the past 2 years in existing sanctuaries?

Mr. TWEEDT. I would like to ask Dr. Foster to cover that question for me.

Mr. FORSYTHE. Fine. Doctor?

Dr. FOSTER. We have tried, since we have been managing these sanctuaries without a management plan over the past 2 years, to spend the money that we had programed for research on management-related questions. For example, in Looe Key we do have the prohibition on spearfishing, so we have financed a study comparing, for example, the return of the snapper-grouper populations to

Looe Key as opposed to areas where spearfishing is allowed. This is the kind of research that we have tried to focus on.

We have research going on in Looe Key, in Key Largo, Gray's Reef. Now in Gray's Reef, for example, we had been in very close contact with the South Atlantic Fishery Management Council. One of the questions they were interested in was the impact of roller-rigged trawls, so we, working with the States of South Carolina and Georgia, proposed a study and carried out a study on the effects of a roller-rigged trawl because the data would be of use to both the Fishery Management Council, the National Marine Fisheries Service, and ourselves.

We have research going on in the west coast sanctuaries. There we have tried to identify priority projects, in consultation with the State of California and the National Park Service, so that by three different agencies combining funds you can have a much more effective research program than if it falls with one agency to fund the research project.

We can make available to the committee—we have a paper that we keep updated in the office that outlines all of the research that is ongoing in all of our sites, if you would like to have that.

Mr. FORSYTHE. I would appreciate having that.

My time has expired. Thank you very much.

Mr. D'AMOURS. Mr. Breaux?

Mr. BREAU. Thank you, Mr. Chairman.

Thank you, Mr. Tweedt, and your staff, for your presentations.

I think what we are finding out is that we in the Congress have placed NOAA and your particular shop in the position of making a lot of determinations on what is in the national interest, and that is why you are finding yourselves in conflict with the fishing groups, with the energy production groups, and with the conservation groups. You are constantly being subjected to litigation from the various interest groups because they do not like what you are doing, or they do not think you are doing enough of it.

I believe that it is the role of Congress to determine what the national interest is. Let Congress make the policy cuts and then give NOAA some direction toward implementation. I had mentioned that I am preparing to introduce legislation today which would come up with a joint role for NOAA and Congress which would use NOAA expertise in determining what areas need protection and need to be recommended as a sanctuary, and then, working with the Congress, let Congress make the national policy cut in determining what the terms of the marine sanctuary are, and then let NOAA carry out the specifics of it.

I would like to know what are your initial thoughts about that, Mr. Tweedt?

Mr. TWEEDT. Well, Mr. Breaux, I cannot comment on your legislation that you have introduced yet, certainly, on behalf of the administration. However, I can tell you that the administration is certainly desirous of working with Congress as closely as possible.

Second, you mentioned there is certainly precedent for such a procedure, as it is done with the national parks.

Mr. BREAU. Also National Wildlife Refuges and a number of other areas. Mr. Tweedt, I get the impression that in the early stages of the marine sanctuaries process, some of the legitimate in-

terest groups, whether they be conservation, fishermen, or energy production groups, do not feel that they have enough information or are not able to have enough input.

I think that a process involving congressional review and designation would give them a more useful opportunity to express themselves. I noticed Dr. Foster, in a quote in the Commercial Fisheries News up in Maine, and I agree with what you are saying, that "it is difficult for fishermen to know how to respond to a sanctuary proposal in its early stages because theoretically it could pose a threat to established fishing. It comes down to trust." Unfortunately the fishing industry by and large does not trust Government, does not trust Congress, and yet I think you are admitting by that statement that we have a real problem.

Dr. Foster, what do you think about the congressional designation proposal, not from an administration position or recommendation, but the idea of having Congress be responsible for adopting a marine sanctuary or not adopting it?

Dr. FOSTER. I cannot imagine how that could cause problems for us. In fact, about the worst thing that I can think of—which is not very bad—is that it would add a time to the designation process. However, on the other hand, I think that it is possible that the benefits could outweigh that.

I mean, there have been many times in the past when I would have loved dearly to have something in my hand saying that somebody—like Congress, for heaven's sake—had approved this thing, so I think it has possibilities.

Mr. BREAUX. Well, when we first established the marine sanctuaries program we did not give you a lot of guidelines to follow as far as making national policy cuts and making the delicate balance between energy development and fishing rights and conservation issues. We just said, "Designate unique areas," and yet it seems to me that what you are forced to do is to make what are some basic national policy cuts on how these things are to be done. I would expect that would be a problem for you, Mr. Tweedt. Has it been?

Mr. TWEEDT. There are two things, Mr. Breaux: The process to date on the site evaluation list has merely been to develop a list of possible sites. Many of the factors that would determine and would have to be weighed before there would be any designation would be in the next stage, when a site is made an active candidate, and then the site would have an environmental impact study and an economic analysis and the factors that would have to be addressed before it would be designated. Therefore, I do not believe that there would be a problem in ignoring many of the concerns that I think you and I both have under the way we intend to manage the site evaluation list. It is just the start.

Mr. BREAUX. If my memory serves me correctly, this whole program was adopted as an amendment by the Senate on the floor in the last few days of a session. It was not done with a great deal of thought and preparation by the Congress. I think that it is time that we do that, and I believe the legislation I have introduced would move in that direction.

Thank you, Mr. Chairman.

Thank you, Mr. Tweedt.

Mr. D'AMOURS. Thank you, Mr. Breaux.

Mr. Young?

Mr. YOUNG. Thank you, Mr. Chairman.

Thank you, Mr. Tweedt. Again, I want to compliment you and the administration for recognizing the problems that exist in Alaska. Your statement clarified some of that. It was a perception problem. I happened to be in the Southeast when it was announced to be 18 sanctuaries or whatever it was, and I think the disturbing factor was—and I hate to kick a dead horse—was that each one of these were premeditated, chosen by the scientists without consideration of other interest groups, and they scientifically precluded activities that were taking place, or at least that was the perception. You have never walked into a buzz saw like I walked into. I am sure you are well aware of my feelings about that.

Mr. TWEEDT. I think our people may have been in the same lumber mill.

Mr. YOUNG. I have two questions—three questions, actually—but a yes or no answer on the first two questions: Under regulations proposed by the sanctuary program, the Secretary has emergency powers to halt activities that affect the resources of a sanctuary. If a sanctuary were established because of the presence of certain stocks of fish and those stocks declined, do you not agree that the Secretary would have the authority to halt commercial fishing for those stocks, regardless of other procedures established by the Congress and our fisheries laws?

Mr. TWEEDT. The sanctuary is protected geographically—

Mr. YOUNG. Yes or no.

Mr. TWEEDT. Surely yes, Mr. Young.

Mr. YOUNG. That is what I thought. This is for the record. This is why we are trying to accept either my good friend from Louisiana's proposal or mine. The regulation overlays something we are already dealing with, State law, Federal law, et cetera.

Second question: Does the act guarantee the establishment of a sanctuary will not affect commercial fishing in a sanctuary?

Mr. TWEEDT. In a constrained sense, no.

Mr. YOUNG. That is right. Thank you.

The other question—and I noticed the committee asked the Chelsea Corp. to be here—I am a little disturbed. In the first place—you know, I rarely take people to task on this—the original contract was for how much for the Chelsea Corp.?

Mr. TWEEDT. \$270,000.

Mr. YOUNG. We had an addition of how much?

Mr. TWEEDT. \$65,000.

Mr. YOUNG. \$65,000, and the Alaskan proportion was?

Mr. TWEEDT. \$51,000.

Mr. YOUNG. For a consulting fee it shows he paid their team how much?

Mr. TWEEDT. Can you answer that for Chelsea?

Mr. SAVAGE. I do not have the specifics for the answer.

Mr. YOUNG. Specifically, if my information is correct, \$6,800. That means that there was a \$44,000 income to Chelsea Corp., and to my knowledge there was no visitation of the sites by the team. Is that correct?

Mr. TWEEDT. That is correct.

Mr. YOUNG. This is one of the most disturbing factors I found in this whole program, that you contracted with a company, they basically took \$44,000 from you, paid a team of Alaskans who are reknowned scientists. They visited the sites? No. That is one of the programs, and consequently, when I found out about it in the paper, they had not really notified anyone.

I would suggest that maybe, just maybe, there was a neglectful part of a contract, and I would read that contract again, if I were you, very closely because my people, the fishermen, were not contacted, were never contacted. The timber people were never contacted. In fact, the only people who were really contacted were Fish and Game, and I cannot find the person they contacted in Fish and Game.

I know they were sort of in a transition period there, or possibly a transition period. As the chairman said, there has to be a better way of doing it. Dr. Foster, maybe the possibility of this Congress having oversight or the OK that gives a longer period of time to study the sanctuaries, I think it might be beneficial.

You know, I do not want to beat a dead horse, and I won't. Again, I want to compliment you on the action of NOAA for taking all of Alaska out. We had just gone through a 147 million acre Federal takeover, and you can imagine how another, additional marine sanctuary, as perceived takeover, went down with my Alaskan constituents.

Again, thank you for your efforts. Hopefully we can rectify this program and we will not have to go my route.

Thank you, Mr. Chairman.

Mr. D'AMOURS. Mr. Anderson, do you have any questions of the witness?

Mr. ANDERSON. Yes. Mr. Tweedt, in some sanctuaries you exclude oil and gas exploration and in others you do not. How do you determine from which sanctuaries you exclude oil and gas exploration and development and which you do not?

Mr. TWEEDT. The two that are excluded, Mr. Anderson, are the two in California.

Mr. ANDERSON. I know. That is why I mentioned it, but I wonder why you choose one to be excluded and others you do not. Is there some criteria you set up?

Mr. TWEEDT. The criteria were set during the last administration, and it is based on protecting environmental resources that it was felt oil and gas activities would damage.

Mr. ANDERSON. OK. Therefore, the four sanctuaries, again, that you do not exclude oil and gas exploration, you are not concerned about the same environmental protection there, or that oil and gas development would not hurt them?

Mr. TWEEDT. The feeling was, in the designation of the other four sanctuaries it was felt that there was not the potential for damage from oil and gas activities.

Mr. ANDERSON. In other words, you predetermined there wasn't any gas there. Is that the reason?

Mr. TWEEDT. I did not and the current staff did not, Mr. Anderson.

Mr. ANDERSON. I was wondering how you have one marine sanctuary that would exclude oil and gas exploration and development

and another one that would allow it. There must be some criteria to determine that.

Mr. TWEEDT. The criteria were, I think, based on what was perceived at that time to be the threat for the given sanctuary.

Mr. ANDERSON. Now, it my understanding that oil and gas explorations are excluded from the Channel Islands marine sanctuary. You just told me that is true, and since the designation process itself is at the heart of this committee's concern with the program, can you tell me the purpose, the procedure you use in making this decision?

Mr. TWEEDT. The procedure that will be used in the future sites is first, they will be sites that are on the site evaluation list—

Mr. ANDERSON. On which list?

Mr. TWEEDT. On the site evaluation list.

Mr. ANDERSON. They would not all be on that site evaluation list?

Mr. TWEEDT. You mean the six prime sites? No, sir. They are existing marine sanctuaries. I thought you were talking about the designation of a future sanctuary. I guess I did not understand your question, Mr. Anderson.

Mr. ANDERSON. I have people out there who are asking me, "How come the islands off my coast were so designated and other sanctuaries were not?" It is very difficult for me to explain that. I cannot get an answer as to how you decide in one case but you do not even concern yourself on the other.

Mr. TWEEDT. Well, the designation of the two California sites was done because it was felt that oil and gas activities would be a threat to the environmental resources of those two areas.

Mr. ANDERSON. However, wouldn't oil and gas activities be a threat to the other sites?

Mr. TWEEDT. Yes.

Mr. ANDERSON. They would not?

Mr. TWEEDT. I might add that the sanctuaries in California did not prohibit oil and gas activities for the existing leaseholders. There were some tracts, OCS tracts, that had been in the sanctuary in Santa Barbara that had been there long before there was a sanctuary program. They were not prohibited.

Mr. ANDERSON. Thank you, Mr. Chairman.

Mr. D'AMOURS. Mr. Shumway, do you have any questions of the witness?

Mr. SHUMWAY. Yes, Mr. Chairman.

I have some concern over the method of implementing this program over a longer term. Some of my concern has been touched on by the chairman, some by Mr. Breaux.

You have outlined for us today some new regulations regarding management and site evaluation, and I think what you have outlined is obviously an improvement over prior efforts to implement this particular act and is certainly more in keeping with the congressional goals which you have provided us with.

However, the concern that I have is this. What is there to prevent future administrations, for example, from reverting to the prior approach? Since you have endorsed title 3 for reauthorization, are you suggesting that there be any legislative changes—not

reissuance of regulations but legislative changes that might prevent changes from administration to administration?

I think what we are all striving for here is some degree of uniformity. If we can accomplish that legislatively through this vehicle, I think now is the time we should know about it and work it into the bill.

Mr. TWEEDT. Mr. Shumway, I agree with you. One of the things that we have been striving for was to have in the sanctuary program some predictability, so that people interested in a given area could predict, and we hope that that is what the site evaluation list will do. We have not, however, proposed any legislative amendments.

Mr. SHUMWAY. My point is, that site evaluation list may well serve the purposes of this administration and may meet with the accord of this committee, but some time in the future there will be another administration. Are we going to go back, then, to some different kind of implementation? If that is the case, then I think that there is certainly need for some legislative work to be done at this point.

Mr. TWEEDT. Well, we expect that the site evaluation list will have enough possible sanctuary sites to keep our people active for the next 5 to 10 years. At that time I guess there would have to be a determination on whether there would be another site evaluation list developed.

Mr. SHUMWAY. Thank you, Mr. Chairman.

Mr. D'AMOURS. Mr. Bosco, do you have any questions?

Mr. BOSCO. I have no questions, Mr. Chairman.

Mr. D'AMOURS. Mrs. Boxer?

Mrs. BOXER. I have two.

The decision to make the Farallon Islands a marine sanctuary was greatly hailed in my State, and I could not have been happier about it personally.

Just relating to Mr. Breaux's legislation, it concerns me that maybe these kinds of decisions could turn political; that we would take the whole idea of identifying a sanctuary away from the scientific side and put it on the floor of the Congress, as far as how many miles it would be and what you could or could not do in the area. I wonder if that would be of concern to you, to get the special interests really involved more directly in the naming of these sanctuaries?

Mr. TWEEDT. Well, the designation of a sanctuary was not intended, I believe, to be purely scientific. You have to weigh the economic factors, you have to weigh the other possible uses for a given area, so I do not know that any forum for a healthy debate—whether it be a public hearing in San Rafael or a debate on the floor of Congress—is bad.

Mrs. BOXER. Do you weigh those factors now in the process?

Mr. TWEEDT. Yes, we certainly will, for any site that goes from the site evaluation list to become an active candidate.

Mrs. BOXER. Therefore, indeed you do that already?

Mr. TWEEDT. It was done somewhat, but the site evaluation list was primarily, to begin with, a nucleus of a bit more scientific-type sites than you mentioned.

Mrs. BOXER. However, under your own testimony, you are going to weigh all these factors?

Mr. TWEEDT. Yes.

Mrs. BOXER. All right. The second point I have to make has to do with Alaska, and I want to understand this. From your testimony, I did not hear you say that there was any scientific reason to walk away from Alaska for 5 years, but really because of a miscommunication and some problems—some very heavy problems. Is that enough reason for you not to consider any sites there for such a long period of time?

Mr. TWEEDT. We believe it is, because we will have sites in many other parts of the marine environment that can more than keep us busy. Therefore, I do not think that there was a problem in that regard.

Second, the process from our standpoint was handled badly. I think that a sanctuary—you mentioned your pleasure with the Farallons—I think one thing that we would all want is a sanctuary that is acceptable by the people, particularly the people closest to it. Therefore, we felt it was a very significant problem.

Mrs. BOXER. Therefore, there was no environmental reason for saying that you are not going to go back to Alaska and look at these for 5 or 10 years?

Mr. TWEEDT. No.

Mrs. BOXER. Thank you.

Mr. D'AMOURS. Thank you, Mrs. Boxer.

Mr. Ortiz, do you have any questions?

Mr. ORTIZ. I pass. I have no questions, Mr. Chairman, thank you.

Mr. D'AMOURS. I have a few more.

Dr. Foster, I have to follow up on your short colloquy with Mr. Breaux. I was not clear from your reply to his question to you, as to whether you thought congressional action was a good idea or not, whether you thought it was good idea because you thought that it would make the process work better or because it relieved you of some responsibility. Which is it?

Dr. FOSTER. No, I do not think, if I understood what Mr. Breaux was saying, that it would necessarily relieve us of any responsibility. In fact, I hope what I said was that I thought the idea had possibilities. We have not really thought about it in great detail. This is the first time, as far as I know, that it has come up.

Mr. TWEEDT. Mr. Chairman, I would also add that Dr. Foster, in any of the things that I have been associated with her, does not duck responsibility.

Mr. D'AMOURS. Well, then, I obviously misconstrued her reply.

You did mention that you might have some concern as to the time this would add to the process, although you did not think it would be very significant. What is the time process now, without congressional approval?

Mr. TWEEDT. The time process now, particularly when we want to have the management plan developed before the sanctuary is designated, is running at least 2 years or a year and a half, up to 4 years in the case of Hawaii.

Mr. D'AMOURS. It would not be difficult, would it, to assume or conclude that adding a congressional layer to the process might add a few more years, might it not?

Mr. TWEEDT. Well, I guess that would depend on how the process functioned with Congress, at what point it was brought to them.

Mr. D'AMOURS. Well, let me be blunt about it: What do you think Congress could add to the process? I frankly see it as just another layer of review and Congress would simply redo what you have already done. Do you see any real benefit of adding a congressional layer to the process?

Mr. TWEEDT. Certainly in the opportunity to full study and discuss a site, we do, yes.

Mr. D'AMOURS. Well, we do have a veto now which is intended to allow the Congress an opportunity to debate and study a site. Does this add to that process?

Mr. TWEEDT. I would assume if Congress took a more active role, it would not necessarily be in a veto mode. It would be in an approving mode. I think that is what Mr. Breaux was talking about.

Mr. D'AMOURS. Mr. Michael Weber, is going to testify later that instead of the congressional designation, maybe Congress could direct the Secretary of Commerce to provide the authorizing committees with a report listing the next 5 or 10 sites, that he is going to designate, and that that might be a sufficient way to involve Congress in the process. What would your reaction be to Mr. Weber's suggestion?

Mr. TWEEDT. I think the same as to Mr. Breaux's: Any way to involve as many interested parties, we are anxious to do. That is one of the problems we had in Alaska; we did not, so——

Mr. D'AMOURS. OK. Just one other question about the funding levels here: If you designate the three sites that are currently active candidates, the management costs for these sites is going to consume just about the total amount of the \$2.26 million authorization, and thus no funds would remain for designating further sites. What would you do if we do not raise that amount? How could you possibly manage any new sites or list any new sites if we keep flat-funding this authorization at \$2.26 million?

Mr. TWEEDT. I think we would manage very well, Mr. Chairman. The amount that we have requested is, we think, ample for a couple of reasons.

The research that is being conducted on any given sanctuary is research designed to help us manage that sanctuary. In many cases that research will have given us the information we need and it can wind down on one sanctuary while those funds would be transferred to another sanctuary. Some of the enforcement activities, we could perhaps do a better job and in a more economical fashion, so I think that there are certainly still ways that we can——

Mr. D'AMOURS. Well, as I understand it the administration of the program costs \$500,000 per year. Is that correct?

Mr. TWEEDT. Sure.

Mr. D'AMOURS. All right, and management expenses for each designated site averages \$200,000 per site. Now if the three current candidates are added to the list of six we already have, that is \$1.8 million for management and \$500,000 for administration and that is your whole authorization. How are you going to designate and manage any future sites on that amount of money?

Mr. TWEEDT. Our management, we average \$200,000 per site and that is over a 4-year period, so we think that we can do it. As I mentioned earlier, the——

Mr. D'AMOURS. Is that \$200,000 per site per year?

Mr. TWEEDT. Per year, excuse me.

Mr. D'AMOURS. Therefore, it is not over a 4-year period. Where are you going to get the money to manage new sites?

Mr. TWEEDT. As I already mentioned, from the research activities which are not an ongoing type of research activity. That is often confused, that the sanctuaries are a research pool that is going to continue. It is research directly aimed at the management of that specific sanctuary. The monitoring activities, there can be some economies made in various sanctuaries. As an example, in the California sanctuary we bought the State of California a car or a truck to help them manage the site; it is doubtful that we would have to buy them another one.

Mr. D'AMOURS. All right.

Mr. TWEEDT. Third, in some of the interpretive activities there is some room for economy there.

Mr. D'AMOURS. My time is up and I want to stick to the 5-minute rule as best I can, but I am not finished. We will get back to this when I can get some more time.

Mr. Forsythe?

Mr. FORSYTHE. Thank you, Mr. Chairman.

Mr. Savage, I understand you were involved in the Alaska site identification process. What are your perceptions on why that process broke down in that State?

Mr. SAVAGE. Mr. Forsythe, I agree that there was a significant communication problem in Alaska. Concerning the context of our proposed or considered candidate sites, the team selected 18 sites as potential areas that they thought the public ought to view as potential candidates; they ought to be aware of the sites that could become sanctuaries within Alaska.

They identified these areas based on their scientific knowledge of Alaska. Each of the team members had been in Alaska, spent most of their entire career working on marine environments in Alaska.

The proposal was misunderstood by a number of groups, I think primarily the fishing group, the fishing people in southeast Alaska, who viewed it as a Federal program that was going to come in there and prohibit fishing. They had recently been dealing with national park issues and other Federal program issues in Alaska, and we did not get the point across strongly enough that these 18 candidate areas were simply candidate areas based on scientific criteria and that beyond the public participation process that we had initiated, we would be selecting down to five or fewer sites in Alaska to recommend to NOAA for further consideration and evaluation.

That information did not get accepted. We did deal with the State of Alaska; we did deal with the Governor's office. We met with them and the State Fish and Wildlife Office, the BLM in Alaska. We met with AOGA. We met with the Northwest Fisheries Management Council to tell them what we were doing, early on in the process when we held our first meeting with the first identification of site areas. That information was communicated to those groups to establish the communications links, and we asked them

for people to add to our mailing lists, organizations. We did get those, those were sent out.

It was a simple perception problem. I am not sure what more we could have done in that instance.

Mr. FORSYTHE. I fully recognize that the State of Alaska is probably the most difficult area of its size in the world to really establish communications. How long a period of time was this process going on in Alaska?

Mr. SAVAGE. Well, we initiated our discussions with the State people, AOGA, and Fish and Wildlife in Alaska, those management people, in May of 1982, provided them with information about the process, talked to the Governor's office. They established a coordinating group to coordinate the responses by the State officials. We spent time with the other groups telling them what we were doing.

The public participation process, the actual mailout of the 18 areas, began in August, on August 18, when we mailed out the packages to approximately 300 organizations within Alaska, made up of recommendations by the State, the Governor's office, the fishing community, groups that we had met with. The North Atlantic Fisheries Management Council provided us with mailing addresses.

We proceeded taking public comment for 45 days. NOAA, because of the problems that were becoming apparent in Alaska, extended the period. We developed press releases to describe the process, but I think that it was partially bad timing, very difficult timing.

Mr. FORSYTHE. The bottom line—you did not make the headlines in the right way and did not get on the television in the right way.

Mr. SAVAGE. It sure didn't.

Mr. FORSYTHE. Thank you, Mr. Chairman. My time has expired.

Mr. D'AMOURS. Mrs. Boxer?

Mrs. BOXER. Just one quick question on oil drilling: Before you prohibit it as part of the rules for sanctuary designation, do you make a finding in each case, exactly why you are prohibiting it? Do you take into account what the area could yield in the way of oil and gas? Do you take into account the exact type of habitat and document it so that there is a strong case in the record for prohibiting it?

Mr. TWEEDT. Certainly those factors would all be considered in any future designation.

Mrs. BOXER. They are designated? I mean, they are delineated in the record clearly, and they will be?

Mr. TWEEDT. We would certainly see that they would be, yes.

Mrs. BOXER. Thank you.

Mr. D'AMOURS. Mr. Tweedt, let's get back to this question of authorizations, if I may. I do not quite understand how you are going to save the \$200,000 that will be needed to administer a new site beyond the three that are approaching designation. You mentioned something about a truck that you would not have to buy again.

Mr. TWEEDT. I gave that as one example, Mr. Chairman.

Mr. D'AMOURS. How do you get to the \$200,000? Could you explain that to me?

Mr. TWEEDT. The management cost of \$200,000—

Mr. D'AMOURS. Yes.

Mr. TWEEDT [continuing]. Includes whatever agreement we have with who is managing the site. As an example, in California it is a combination between the U.S. Park Service and the California State Department of Fish and Game, so it is a contractual arrangement.

I think one of the things that you would not automatically assume is that each of the sanctuary sites, particularly the three that are now coming on line, would necessarily entail the same costs as any of the present ones. The one in California is 1,250 square miles, the one in Santa Barbara. It is by far the largest site.

Mr. D'AMOURS. Well, the \$200,000 is an average cost.

Mr. TWEEDT. Yes, sir.

Mr. D'AMOURS. We know that. Are you suggesting that that average is going to drop?

Mr. TWEEDT. I believe that it well could, yes.

Mr. D'AMOURS. Could you document that? We are going to have to decide how much money you are going to need to manage these sites, and you are saying that the cost of management is going to drop, and I wonder if you could give us some—

Mr. TWEEDT. If I may submit something to you, yes, I would be happy to.

Mr. D'AMOURS. Well, will you do that as a matter of fact?

Mr. TWEEDT. Certainly.

Mr. D'AMOURS. I would appreciate and the committee would very much appreciate receiving that information.

I have no further questions. I want to thank the panel. Does anybody else have any?

[No response.]

Mr. D'AMOURS. There are no further questions. We thank you for having attended.

Mr. TWEEDT. Thank you.

[The following was received for the record:]

ADDITIONAL QUESTIONS OF MR. D'AMOURS AND ANSWERED BY DEPARTMENT OF COMMERCE

Question. During the question and answer portion of your testimony, you stated that sufficient savings could be gained to bring additional sites into the system and yet manage the entire system without additional appropriations. Based on management plans that are existing or are being prepared, what cost savings over the next three years can be achieved that would allow the three active candidates to be brought into the system and additional sites to be considered for sanctuary designation? In particular, what programs, activities, studies, etc. would be reduced or eliminated to save costs?

Answer. With continued level funding, in fiscal year 1984 nine sites can be managed. Start up funds will be available for the three Active Candidates currently under consideration for designation. Site funding for each provides for the following:

- Hiring an onsite manager;
- Hiring a part-time secretary;
- Hiring additional rangers for enhanced enforcement of existing regulations and any new ones promulgated for the sanctuary;
- Initiation of the interpretive program; and
- Initiation of the research component.

Funding for the six currently designated sites also includes each of the three essential management components, i.e., administration/management, interpretation and research. In addition, four of the sites will have enforcement funding since these particular sanctuaries require a presence beyond that available from the Coast Guard. The above applies to fiscal year 1985 as well. During the latter year, however, research efforts in certain sites will decrease since priority management-

related questions will have been answered during work in previous years. In addition, minor savings will result in several of the interpretive programs. In these instances, initial investments required to start up a program will be completed and the year-to-year upkeep operation cost will reflect the decrease in expenditures. In the future, as new sanctuaries are designated, efforts will be made to share office and interpretive space with state and other Federal agencies involved in park and special area management. If such an arrangement is not available, we will rent space in existing facilities.

Funds will be obligated in fiscal year 1983 to complete evaluation of a site for possible fiscal year 1985 designation. In fiscal year 1984, one site will be selected from the SEL for future evaluation and possible fiscal year 1986 designation. The SEL provides a choice of manageable sites which should result in increasingly cost efficient management. In fiscal year 1985, the above mentioned reduction in research effort will allow start up management of one site. For example, in the past such costs have varied from \$100,000 to \$200,000. Projected management costs for all onsite operations through fiscal year 1986 are: fiscal year 1983, 6 sites—\$1,617,000; fiscal year 1984, 9 sites—\$1,650,000; fiscal year 1985, 10 sites—\$1,500,000; fiscal year 1986, 11 sites—\$1,400,000.

ADDITIONAL QUESTIONS OF MR. FORSYTHE AND ANSWERED BY DEPARTMENT OF COMMERCE

Question. The size of sanctuary sites has been an issue throughout the history of this program. You indicate on page 9 of your statement that the sizes of the sites on the proposed SEL are smaller than most on the old LRA "in line with our policy of keeping sanctuaries manageable, discrete units." Would you please provide examples of the range of sizes of the sites contained on the proposed SEL?

Answer. The average size of the study areas on the proposed SEL is approximately 330 square miles (mi²). They range in size from the largest, 1,805 mi² (Nantucket Shoals/Sound and Oceanographer Canyon, to 2 mi² (Facpi Point, Guam). The average size of the sites in each region is: North Atlantic, 1,010 square miles; South Atlantic, 107 square miles; Caribbean, 40 square miles; Gulf of Mexico, 79 square miles; Eastern Pacific, 196 square miles; Western Pacific, 211 square miles; Great Lakes, 724 square miles.

Question. Please describe and elaborate upon the specific criteria that NOAA will use in making its determinations to move a site from the SEL to Active Candidate status.

Answer. NOAA will move a site to Active Candidate status based upon several criteria. First, consideration will be given to:

Whether the site is located in a marine area without representation among existing sites; and

The degree of state and local support if it is a state water site.

After a site (or sites) is evaluated based on these considerations, it will be weighted in terms of the following criteria as specified in the program regulations soon to appear in the Federal Register as final rules:

The area's resource and human use values;

Threats to resources;

Adequacy of existing management or regulatory regimes;

Feasibility of designation in light of size, fiscal constraints, and staffing; and

Initial consideration of economic impacts and benefits of designation.

Question. It is my understanding that the proposed SEL will not contain any sites in Alaska. What are the procedures for adding Alaska sites to the list in the future.

Answer. The current final Marine Sanctuary Site Evaluation List (SEL) which will serve the program for 5-10 years consists of sites from seven regions only. Alaska is not included. New sites will be considered for addition to the SEL only in accordance with section 922.22 of the revised program regulations which are scheduled to appear in the Federal Register in May 1983, subject to Department of Commerce and Office of Management and Budget clearance. (A copy of that section is attached for your information).

ADDITIONAL QUESTIONS OF MR. PRITCHARD AND ANSWERED BY DEPARTMENT OF COMMERCE

Question. Will you please explain the process whereby the State and local public entities are contacted in the early stages of the site selection process, that is, prior to information of the SEL?

Answer. State and local contacts were developed in several ways. In April 1982 a letter from NOAA Administrator Byrne was sent to the Governor of each coastal state explaining the process and requesting a liaison at the local level. In turn, this liaison was asked to provide further state and local contacts. NOAA also requested mailing lists from state coastal zone contacts and the regional team members.

Question. On page 8 of your testimony you outline the process where responsible state officials and key user groups were contacted and mailing lists were formed. Would you please comment on the strategies employed to gain state acceptance and the response of various states?

Answer. Information was provided to the liaison and other State and local officials by Chelsea and NOAA. Chelsea staff and team members met or talked with the public and interested groups in every coastal state. In several instances, NOAA officials were invited and met with state and local officials. This occurred in Alaska, Washington, Maine, Massachusetts and Texas. In preparing the proposed SEL, NOAA responded to state concerns by deleting any portions of state waters requested by the liaison agency.

Question. On page 11 of your testimony you stated that in cases involving state waters a determination to see national interests will be served by a sanctuary designation. Will you please elaborate on the criteria and what is involved with this national interest test?

Answer. NOAA will review sites in state waters to determine whether the resources have a greater than local significance, have a value to the nation at large, or are not commonly found throughout the waters of the U.S. Examples of state waters of national interest would be habitat areas with rare or endangered species, significant natural features, important wetlands, well developed and relatively undisturbed coral reef systems, etc.

Mr. D'AMOURS. Our next group of witnesses is a panel composed of Mr. Arthur Spaulding, who is the vice president and general manager of Western Oil and Gas Association, and Mr. Spencer Apollonio, who is the commissioner of the department of marine resources of the State of Maine.

We welcome you both, gentlemen, and we look forward to your testimony.

STATEMENT OF ARTHUR O. SPAULDING, VICE PRESIDENT AND GENERAL MANAGER, WESTERN OIL & GAS ASSOCIATION

Mr. SPAULDING. Good morning, Mr. Chairman, members of the committee. My name is Arthur O. Spaulding. I am the vice president-general manager of the Western Oil & Gas Association, headquartered in Los Angeles.

I should say at the outset for the benefit of Mr. Young that the Alaska Oil and Gas Association is a division of ours. They operate in Anchorage. Our testimony has been reviewed by the people in Alaska, and I think it reflects their viewpoints as well as ours to the south.

Mr. D'AMOURS. Mr. Spaulding, I thank you very much for that clarification.

Mr. SPAULDING. I believe each of you has received a copy of the written statement which we have prepared, and it is not my intent this morning to recite that statement for you. I think it would be your preference that I talk about matters in addition to that statement, if you would like.

Mr. D'AMOURS. That would be fine.

Mr. SPAULDING. I should like to provide you, then, at the outset, with some explanatory detail which might serve as a prologue for the statement itself. That explanatory detail has to do with what is going on offshore from California, to give you a better idea of our concerns for the marine sanctuaries program.

To begin with, citing some history, offshore oil and gas development had its origin in the Santa Barbara Channel, as perhaps some of you know. It began in 1895. Operations in the Santa Barbara Channel have taken place sporadically since that time, and to give you some recent figures, in 1980 production from the Channel amounted to about 30,000 barrels per day. In 1982 production amounted to significantly more, something on the order of 80,000 barrels per day, as a consequence of Exxon's Hondo platform going on production.

Now the prospects for developing additional oil and gas accumulations and production in the Santa Barbara Channel and elsewhere offshore from Santa Barbara County are outstanding. Exxon has recently described its proposal to expand its production at Hondo from its present level of about 40,000 barrels per day to as much as 125,000 barrels per day. Other operators at the westerly end of the Santa Barbara Channel have clear indications that discoveries which they have made may yield additional tens of thousands of barrels per day, if not hundreds of thousands of barrels per day.

Turning to the north, from Point Conception northerly up toward Santa Maria, still westerly of Santa Barbara County, the discoveries made by Texaco, Chevron Phillips, Union Oil Co., and Occidental in partnership with Husky most recently, again give very positive indications that very substantial accumulations of oil have been found and eventual production may be measured in hundreds of thousands of barrels per day.

If you add all of these together, it is not unlikely that we are talking about production of a magnitude of 500,000 barrels per day.

Now to give you some measure of the significance of production of that magnitude, if you equate that against our import program at the present time, our current petroleum imports amount to about 4 million barrels per day, so, if we are able to develop production of half a million barrels per day within the next 10 years, we will make a very large contribution to solve our import problem. You can see that that is as much, if not more than 10 percent of our current level of imports.

Thus, I think it is easy to understand our concern for a marine sanctuaries program which impinges upon that production or any other program which would tend to delay or otherwise block the development of that large production we anticipate.

Now with respect to the marine sanctuaries program itself, we think it is a splendid idea to preserve the conservational, recreational, ecological, and esthetic values that are intrinsic in our marine environment. To do that makes a significant contribution to the evolution of our society, in our opinion.

We think it is an equally splendid idea to seek to find new accumulations of oil and gas, especially where those prospects are as attractive as they are offshore from California. Discoveries of the magnitude I have been describing would be a means of sustaining our economy and stopping the hemorrhage of our dollars going to pay for foreign oil, to a great extent. Similarly, a contribution would be made to the solution of many of our national security problems, national security at the present time impaired or endangered as a consequence of our dependence upon foreign oil.

I suppose it was an inevitable collision, and it is predictable that this collision would take place in the Santa Barbara Channel, an area of scenic grandeur as well as a region of exploratory and hydrocarbon development potential, second only to the Gulf of Mexico offshore in its productivity at the present time. It is a paradox, somehow, that all of these things have come together in connection with the Santa Barbara Channel Islands Marine Sanctuary. The paradox is exemplified where we have a prohibition in the regulations of that sanctuary against development or drilling on new leases which may be issued, as opposed to permission which is granted to develop leases which were previously existing, prior to the designation of the sanctuary. In fact, it makes no sense in our opinion to prevent drilling in the future within the Santa Barbara Channel Islands Marine Sanctuary on new leases, because clearly no new leases will be issued as long as people will be prohibited from drilling upon them.

All of these problems have coalesced in a recent decision made by the California Coastal Commission, wherein the Coastal Commission denied a permit which was requested upon application of one of our member companies to drill upon a valid lease which the operator held within the Santa Barbara Channel Islands Marine Sanctuary. There perhaps were other reasons why that permit was denied, but it is incontestible that the presence of the marine sanctuary contributed to the denial of that application, so, thus, our fears have been fulfilled that the marine sanctuaries program has impinged upon our capacity to find and produce oil in areas where prospects are extremely attractive.

Our fears are equally founded, we believe, in connection with new sanctuaries which may be proposed in the future. The Chelsea Corp. has indicated consideration for as many, I believe, as nine sanctuaries offshore from the three western States—Washington, Oregon, and California. Our fears relate to the possibility that the precedent established in the no-oil regulations of the Channel Islands Marine Sanctuary would carry over into any new marine sanctuaries that may grow out of the present sanctuaries program.

Finally, to get to the recommendations of our statement, I remind you that we find we have no problems with marine sanctuaries per se, provided that their basic purposes and their fundamental rationale are carried out and properly observed. We believe a showing of necessity must be made in accordance with law in the designation of these marine sanctuaries, to preserve the values which we have recounted earlier. Third, we believe that any future marine sanctuary should not be tainted with a prohibition against oil and gas operations, in that we believe that marine oil and gas operations are entirely compatible with the marine environment. Lastly, we believe that periodic reviews having to do with funding of the marine sanctuaries program and periodic reviews of the direction of that program to make it consonant with the original intent of Congress should be made.

Thank you, Mr. Chairman.

[Material follows:]

PREPARED STATEMENT OF ARTHUR O. SPAULDING ON BEHALF OF THE WESTERN OIL & GAS ASSOCIATION

I. INTRODUCTION

My name is Art Spaulding. I am Vice-President and General Manager of the Western Oil and Gas Association ("WOGA"), a trade association representing 92 companies which explore for, develop and market petroleum and petroleum products in the western United States. WOGA members have no objection to the marine sanctuaries program as it was originally adopted by Congress. We support the preservation and protection of carefully chosen marine and estuary areas that contain truly unique and valuable marine life or artifacts. WOGA members object strongly, however, to the way the marine sanctuaries program has been administered nationwide and in particular the way it has been implemented in areas offshore California, where it is being used as an excuse to stop oil and gas development. Congressional debates show that this is not what Congress intended when it adopted the program. Rather, the Marine Sanctuaries Act contemplated the protection of small areas of unique significance which were not otherwise the subject of federal authority. In a few cases, this has been accomplished. In most cases, it has not.

This is not the first time that WOGA has testified concerning the Marine Sanctuaries Act. In past years, the focus of our comments at reauthorization hearings has been much the same as outlined above. Now, however, the sanctuaries program has been in existence long enough to provide us with some specific examples which demonstrate that our concerns were well-founded. For example, we have objected in the past to the adoption of regulations for sanctuaries offshore California which prohibit oil and gas operations on new leases within the sanctuaries. Not only did we feel that such prohibitions were not "necessary" to effectuate the purposes of the Marine Sanctuaries Act, as required by that Act, but we predicted that they might lead to a blanket prohibition of such activities wherever a sanctuary was designated. Recently this prediction has come true. While the regulations only prohibit oil and gas activities on new leases, operations have been prohibited on an existing lease in the Santa Barbara Channel on the ground, among others, that the area is a marine sanctuary. This interpretation has no foundation in either the Act or the implementing regulations for the Channel Islands Marine Sanctuary. However, it is a perfect example of how this Act is being used for purposes for which it was never intended.

Although the prohibition on oil and gas operations in sanctuaries offshore California is the focus of our comments, we have several other ongoing concerns. One is the size and number of present and future proposed sanctuaries. Another is the regulatory "overkill" which results from a program which has accomplished little or nothing more than that which is already being handled by other regulatory agencies. At best, the sanctuaries program offers the potential for duplicative effort, confusion and conflict. Finally, we do not believe the costs of the program can be justified by the results which have so far been achieved. Given these overriding problems, it is our view that the sanctuaries program should be redirected to accomplish the original intent of Congress.

II. DISCUSSION

A. Clarification of purposes

Under the Marine Sanctuaries Act, in order to designate an area as a marine sanctuary, the designation must be:

* * * necessary for the purpose of preserving or restoring such areas for their conservation, recreational, economical or aesthetic values. 16 U.S.C. § 1432.

Legislative history shows that use of the term "necessary" was no accident. Marine sanctuaries legislation was at one time opposed on the floor of the House on the ground that it would result in the "unnecessary locking up" of offshore resources, particularly oil. (Cong. Rec. House, Sept. 9, 1971, p. 31134.) The sanctuaries legislation was defended by Congressman Lennon, the bill's sponsor, on the basis that:

"The Secretary must find that oil exploration or extraction cannot be conducted consistent with the purpose for which the sanctuary was established."

Congressman Dingell emphasized: "This legislation is not going to halt oil drilling" (page 31136). The stated intent of Congress at the time it enacted the legislation was to protect unique ocean areas, and only to interfere with energy development when it was demonstrably inconsistent with the purpose of the sanctuary. A

perfect example of a sanctuary which fulfills this purpose is the marine sanctuary to protect the historic U.S.S. *Monitor*.

The federal government's implementation of the marine sanctuaries program on the West Coast has been in direct conflict with this stated purpose. The implementing regulations for both the Channel Islands Marine Sanctuary (designated on September 22, 1980) and the Point Reyes/Farallon Islands Marine Sanctuary (Designated on January 16, 1981) prohibit, without any showing of necessity, oil and gas exploration development and production activities on all leases within the sanctuary area issued after the sanctuary was designated. (45 Fed. Reg. 65198 (1980); 46 Fed. Reg., p. 7936 (1981)).

Yet there is nothing in the Marine Sanctuaries Act which makes it "necessary" to prohibit oil and gas operations on new leases. Therefore, WOGA has from the beginning taken the position that sanctuary designation was being improperly used to eliminate offshore oil operations in sanctuary areas. Recently these concerns have intensified because the California Coastal Commission, a state agency empowered by the Coastal Zone Management Act with consistency review powers over all activities affecting the California coastal zone, has used the Channel Islands Marine Sanctuary to prohibit oil and gas operations on existing leases, as well as new leases. At a recent hearing, the Commission denied the request of one of WOGA's member companies to drill two wells on an existing lease on the ground, among others, that the lease was located in a sanctuary and drilling was therefore inconsistent with the State's coastal management program. This was done even though the provisions of the Marine Sanctuaries Act and the Implementing regulations for the Channel Islands Sanctuary make it clear that oil and gas operations are prohibited only on new leases, and not, as the Commission's ruling would suggest, on existing leases.

WOGA is also concerned with the large number and excessive size of the sanctuary sites being proposed nationwide. We are advised that as many as 35 sites will be given active consideration. Although we have no information as to the size of these proposed sanctuaries, we have found in the past that excessively large areas are proposed for designation, and often that oil and gas operations would be severely restricted or prohibited in the areas. The prohibition of petroleum development is invariably made without any showing, based on scientific research or prior experience, to support it.

We request that the subcommittees examining the reauthorization take a close look at the effect on energy of the sanctuaries designated and proposed, and clarify that the authorizing legislation does not require the exclusion of oil and gas activities from within a sanctuary.

B. Examination of duplicative or conflicting regulations

We also request an examination of the duplicative and conflicting regulations which have resulted from the sanctuaries program. In the two areas offshore California where sanctuaries have been designated, the designations have done nothing more than add multiple layers of bureaucracy to the already numerous agencies with jurisdiction over the sanctuary areas. Taking the Channel Islands Sanctuary as an example, at the time of the designation there were approximately eighteen federal and state agencies which administered some 21 statutes, most of which are related to environmental protection. To further point out the duplication of effort, we are advised that the National Oceanic and atmospheric administration ("NOAA") has designated the California Department of Fish and Game, a state agency which is already enforcing its own very similar laws and regulations in this area, as the lead agency to implement the sanctuaries regulations for the Channel Islands Marine Sanctuary. Such duplicative and oppressive regulation in no way furthers the purpose of protecting discrete and unique areas.

C. Examination of excessive costs

Finally, we urge that the subcommittees examining the reauthorization review the costs involved in the present and future administration of the sanctuaries program. In Alaska, for example, NOAA hired an independent contractor to help with the selection of proposed sanctuary sites. The Contractor's recommended sites covered 38,000 square miles, with individual sanctuary proposals as large as 10,000 square miles. After a general outcry from almost all segments of the potentially affected Alaskan communities, as well as protests from Alaska's Congressional delegations, the Contractor was relieved from its responsibilities and the site evaluation process terminated. (See Letter to Frank H. Murkowski, United States Senator, State of Alaska, from Mr. William Matuszeski, Acting Assistant Administrator, NOAA, dated Oct. 26, 1982 (a copy is attached hereto).) There is no indication that

the Contractor's work has been any more successful or productive in any of the other seven regions. Yet NOAA has contracted to pay a large sum of money for these services. At a time when budget constraints are forcing cutbacks in critically needed programs and services, the public deserves more for its money. There clearly exists a need to limit the size of potential designations, as well as requiring a showing that the proposed sanctuary is "necessary" to effectuate the purposes of the Act.

III. RECOMMENDATIONS

Our overall recommendation is that the sanctuaries program be redirected and limited to accomplishing the original intent of Congress. Specifically, we recommend the following:

First, we suggest that new sanctuaries be designated only where there is a clearly defined need and where it can be established that the implementing regulations will not duplicate or conflict with other regulations already in effect in the area. As to any sanctuary which will have an impact on oil and gas activities, we strongly recommend that all regulatory agencies with jurisdiction review and affirmatively find that the sanctuary regulations are consistent with but not duplicative of their own OCS exploration and development regulations and permit requirements.

Second, we ask that the subcommittees review the amount of funds already expended or committed to the sanctuaries program to determine if such an expenditure is necessary to effectuate the goals of the program.

Third, we recommend that a mandatory three-year review be conducted on all sanctuaries to determine if they are still "necessary" to effectuate the purposes of the Act.

Thank you for listening and considering these comments.

U.S. DEPARTMENT OF COMMERCE,
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION,
OFFICE OF COASTAL ZONE MANAGEMENT,
Washington, D.C., October 29, 1982.

Hon. FRANK H. MURKOWSKI,
U.S. Senate,
Washington, D.C.

DEAR SENATOR MURKOWSKI: This is to inform you of actions we are taking in response to concerns you have raised regarding the evaluation of candidate marine sanctuary sites in waters adjacent to the State of Alaska. A number of Alaskans have pointed out that important groups with vital interests in the oceans have not been sufficiently well informed of purpose of the site evaluation effort or the implications of eventual designation of marine sanctuaries. In response to these concerns, and with considerable assistance from you staff, Dallas Miner, Director of the Sanctuary Programs Office, and staff member Kelvin Char Held a series of meetings in Alaska during the month of October with a wide range of interested groups and individuals.

The results of this investigation indicate that, indeed, there were a number of serious deficiencies that prevented timely and fully informed public involvement by important interested groups in the marine sanctuary site evaluation process. Prior reports on the degree of contact with interested groups by the team of Alaskan scientists, state agencies, and Federal officials, were simply not borne out by the experiences of the Alaskans to whom Messrs. Miner and Char spoke. While many of those interviewed expressed basic sympathy with the general purposes of the marine sanctuary program, there was near unanimous opinion that the deficiencies in public participation in the process to date made it undesirable to pursue the present course.

Under these circumstances, we are terminating the site evaluation process for new marine sanctuaries in the Alaska region, and relieving the contractor and the regional scientific team of further responsibilities with respect to Alaskan sites at this time. We plan to proceed with development of a Site Evaluation List comprising a total of approximately 25 candidate marine sanctuary sites from 7 other regions of the Nation. This list will replace the current "List of Recommended Areas" which includes, among others, 13 large-scale sites in Alaskan waters, none of which meet our current criteria for compact size and proven need for more intensive management. The new Site-Evaluation List will serve as our exclusive source of active marine sanctuary candidates. Once that List is considered exhausted, we will undertake a new site evaluation process. This should give adequate opportunity for us to work with your office, State of Alaska agencies, and important marine interests to

assure that any future efforts to apply the marine sanctuary program to Alaskan waters is responsive to Alaskan concerns.

Sincerely yours,

WILLIAM MATUSZESKI,
Acting Assistant Administrator.

Mr. D'AMOURS. Thank you, Mr. Spaulding.

On that point you just made with regard to the Santa Barbara Channel, isn't it true that that exploration was prohibited not because of the marine sanctuaries program but because of the consistency provisions of the coastal zone management program, and that there were several grounds given for that decision, among which were vessel traffic safety, impacts on commercial fishing, oil spill contingency plans, danger to endangered species, as well as the presence of the sanctuary? Isn't that true?

Mr. SPAULDING. Those were the statements of the findings of the California Coastal Commission but, as I have mentioned, the present—

Mr. D'AMOURS. However, it was denied by the State of California under the consistency provisions of the CZMA, not by NOAA because of the sanctuary.

Mr. SPAULDING. That is true, Mr. Chairman. In other words, consistency has to be found by the State of California through its coastal commission. That is a requirement before any permit can be issued.

Mr. D'AMOURS. However, if that is true, then your point that somehow the creation of the sanctuary is what prohibited the exploration is not true.

Mr. SPAULDING. Well, it is not the creation of the sanctuary. The sanctuary had been created, but the California Coastal Commission—

Mr. D'AMOURS. However, my point is that with or without a sanctuaries program, under CZMA consistency this exploration would have been halted.

Mr. SPAULDING. Oh, that is not my impression, Mr. Chairman.

Mr. D'AMOURS. Why not? I gave you the reasons: vessel traffic safety, impacts on commercial fishing, oil spill contingency plans, danger to endangered species. Are you suggesting that those were not the reasons?

Mr. SPAULDING. I suggest that those are reasons that the coastal commission found in connection with its requirement to develop a consistency finding, but I suggest at the same time that the presence of the marine sanctuary also influenced the coastal commission's findings.

Mr. D'AMOURS. All right. Without the sanctuaries program, that finding might well have been made.

Mr. SPAULDING. It might well have been made, and it might well not have been made.

Mr. D'AMOURS. Well, that is highly speculative on your part. I would suggest that, given that the sanctuaries were only one of the five reasons listed, that one could assume it might have been done anyway.

I have some questions I want to ask you that I am going to read, because they are from Mr. Anderson, so in part of my 5 minutes

that I have left, I will do it. I am doing this for the record. Mr. Anderson had to leave.

What sort of criteria would you recommend for the determination of a marine sanctuary?

Mr. SPAULDING. The criteria are specified, I believe, in the law, the values which we have related already. They have to do with conservation, they have to do with recreation, esthetics, and there is one more.

Mr. D'AMOURS. Well, I am assuming Mr. Anderson wanted to know how you would change or add to those criteria.

Mr. SPAULDING. I really do not believe that I am the one to provide that sort of information, Mr. Chairman, in that our concern has to do with being able to drill for oil and gas within sanctuaries as one of the multiple uses which I believe are contemplated in the original plan of Congress.

Mr. D'AMOURS. Do you expect that the oil and gas below and around the Channel Islands will ever be developed, and do you have any idea when that might be?

Mr. SPAULDING. If you are talking about the area within and around the marine sanctuary around the islands, the question arises about the regulations themselves. The regulations must be changed in order to permit any future leasing and drilling and development.

Mr. D'AMOURS. Another question that Mr. Anderson asked me to ask you is, "How can you assure this committee that the important living marine resources which are abound throughout the Channel Islands would be protected if we allow oil and gas exploration in these islands? Can you point to a successful example in other offshore areas?"

Mr. SPAULDING. In answer, Mr. Chairman, I believe that, if you consult the record for the past 10 years, of offshore drilling and development operations, you will find that record virtually unblemished with any accidents which might give rise to the concern, so the answer to the question is, "yes, indeed." I think all you have to do is to look at what we have accomplished during the past decade to see that that concern is accounted for by the quality of our operations.

Mr. D'AMOURS. Well, on the assumption that I still have a little time, would you favor congressional designation of marine sanctuaries instead of the designation process by the National Oceanic and Atmospheric Administration?

Mr. SPAULDING. Mr. Chairman, I believe it is premature for me to answer that question, in that I have not been able to obtain a consensus from our membership in response.

Mr. D'AMOURS. All right.

Mr. SPAULDING. I am aware that some of our member companies do have concerns about a change in the procedure, so I really cannot answer it on behalf of my association.

Mr. D'AMOURS. All right. My time has expired, and I will turn the questioning over to Mr. Forsythe.

Mr. FORSYTHE. Thank you, Mr. Chairman.

On page 5 of your testimony you request the subcommittee, when considering reauthorization of the program, to clarify that the authorization does not require the exclusion of gas and oil activities

from within a sanctuary. To my knowledge Congress has never considered legislation which explicitly excludes or includes any public or private activities within a sanctuary. How do you justify such a specific exclusion as you recommend?

Mr. SPAULDING. How do we justify a specific exclusion or a specific way in which oil and gas operations would not be prohibited? Is that your question, Mr. Forsythe?

Mr. FORSYTHE. Well, I understand from your testimony, you say that we should spell it out that they are not excluded, and apparently this has never been done specifically. There are criteria that are used, and if a use of the sanctuary is compatible with the criteria, the activity may proceed. That leaves some room for judgment, of course, going both ways. I take it you do not want that left to anybody else, you want the law to specifically, in a sense, permit the activity.

Mr. SPAULDING. Well, if that would be a means of guaranteeing, for instance, that we would have the opportunity for drilling within marine sanctuaries, that certainly would be an explicit way of doing it.

On the other hand, I think what we are really concerned about is what mentioned before—mainly, the opportunity of being able to enter marine sanctuaries for drilling operations—and whether or not it is by the judgment of individuals administering the program or by congressional action.

Mr. FORSYTHE. I guess I come at this in a little bit different way because I share some deep concerns about some of the things that have been happening in the program in the past. I agree with those who have said here this morning that there have been some very significant improvements in the management of the program in terms of really doing a far better job of keeping in concert with what I view as the goals and intent of the program; however I am not satisfied that the goals and intent are well enough spelled out in the law today.

You pointed out the goals of conservation, recreation, ecological or esthetic values. I think it is in that area that we perhaps might need to clarify or elaborate upon. The issue of the size of sanctuaries that go beyond the limitations as expressed in the goals, isn't that an important thing to be considered?

Mr. SPAULDING. Yes, I think it is, Mr. Forsythe. One of our concerns does go to the size of marine sanctuaries. The original marine sanctuary was a very small one. Some of those which have been contemplated and now canceled offshore from Alaska were very large ones.

Mr. FORSYTHE. It is hard to keep that kind of an action in context with the goals and intent of Congress as was spelled out in the law. Correct?

Mr. SPAULDING. I would say that is correct.

Mr. FORSYTHE. Thank you.

Thank you, Mr. Chairman.

Mr. D'AMOURS. Thank you, Mr. Forsythe.

In the interest of expediting the process, we are going to have only two short questions, one from Mrs. Boxer and one from Mrs. Schneider, of this witness, and then we will hear from the next wit-

ness, Mr. Apollonio, and we will resume questioning of the two of you.

Mrs. Boxer?

Mrs. BOXER. Thank you, Mr. Chairman.

Mr. Spaulding, have you ever seen the results of an oil spill on the wildlife?

Mr. SPAULDING. Directly on wildlife itself? No.

Mrs. BOXER. Could you ever see any reason why it would be necessary to prevent an oil spill or to prohibit oil drilling off the coast of California? Is there any set of circumstances that you would agree called for such a ban?

Mr. SPAULDING. A complete ban on drilling operations?

Mrs. BOXER. In a certain area, because you did state that you were very supportive of protection of the environment, and you said that the act was important.

Mr. SPAULDING. Yes, indeed.

Mrs. BOXER. Is there any time that you would agree that there should be an all-out ban in a certain designated area?

Mr. SPAULDING. It has been my experience, Mrs. Boxer, that oil operations can be made compatible with any set of environmental conditions, and I cannot conceive of a set of environmental conditions where such a ban would be justified.

Mrs. BOXER. Therefore, you see no conflict at all between the activities of drilling off the coast of California with protection of the environment? You think they are compatible?

Mr. SPAULDING. Yes, indeed.

Mrs. BOXER. Thank you.

Mr. D'AMOURS. Mrs. Schneider, for a short question.

Mrs. SCHNEIDER. Thank you very much, Mr. Chairman.

I appreciate your testimony Mr. Spaulding. In that testimony you mentioned three different parameters and discussed those. They are size, number, and unique marine mammals or prime breeding areas, things that ought to be considered as criteria. I wonder if you could first address the size of a marine sanctuary. You seem to have some opinion on it and I am wondering, for the comprehensive management purposes, what would you consider to be an appropriate size for a marine sanctuary?

Mr. SPAULDING. It is hard to say, Mrs. Schneider. In the case of the U.S.S. *Monitor*, for instance, the sanctuary was very small for very obvious reasons. On the other hand, it is conceivable to me that some of these values which are recounted in the law would extend over much broader areas than just a few acres or square miles, but I should think that in the evaluation of the desirability and the necessity for creating a marine sanctuary, that size would enter into it. I mean, possibly you could create a marine sanctuary throughout the entire Santa Barbara Channel for particular reasons, but on the other hand, is that really necessary to do that? It seems to me that the necessity would obtain, perhaps, to just enough of the area to guarantee the survival of whatever values are indigenous to that region.

Mrs. SCHNEIDER. Well, then I would say that probably you and most members of this committee are in agreement on that point.

How about number? You mentioned that in your view there is a proper number of marine sanctuaries, and perhaps we have too

many present and potential marine sanctuaries that are being discussed. In your mind, what is the proper number?

Mr. SPAULDING. Again, I cannot give you any finite number as being proper. My impression, again, would be that probably the number is related to the values that we are trying to preserve. I think our concern mainly has to do with the opportunity that the oil industry should have in order to explore for oil and gas. Regardless of the size, there obviously should be an upper limit on the size of these sanctuaries, but on the other hand, as long as we have that opportunity to explore for oil and gas, we believe that is in the national interest and in our best interest, too.

Mrs. SCHNEIDER. You also had mention on page 1 of your testimony that State areas should contain "truly unique and valuable marine life." Can you elaborate a little bit more on that? Would you consider, for example, prime breeding areas for marine mammals as something that ought to be considered?

Mr. SPAULDING. If those mammals, for example, could not be found anywhere else, I should think that they would be subject to consideration.

Mrs. SCHNEIDER. Those that are endangered species, for example?

Mr. SPAULDING. Yes.

Mrs. SCHNEIDER. How about unique breeding areas?

Mr. SPAULDING. Again, if you cannot find a breeding area similar, by definition of the word "unique" it would have to pertain precisely to that place, and that conceivably would be one of those values mentioned in the law.

Mrs. SCHNEIDER. Well, in your testimony you mentioned the two California sites, and it is interesting to note that those two islands happen to be—one is a prime breeding area for marine mammals, and the other one, the Farallon Islands, has the largest sea bird rookery in the continental United States. Now wouldn't those specifics fit into your criteria?

Mr. SPAULDING. I think they very well might, but our concern about the Channel Islands Marine Sanctuary does not go to the unique aspects of the marine environment which have resulted in its designation, but rather to the prohibition against oil and gas operations which has come through the regulations.

Mrs. SCHNEIDER. Well, it seems to me that if you feel that there ought to be specific language, for example, as this committee is in a position to make those kinds of determinations, we have to be pretty clear as to what "unique and valuable" marine life is all about. It seems that those two particular sites do contain what are considered by most to be both unique and valuable, so I think—

Mr. SPAULDING. According to the experts, I would have to agree with you.

Mrs. SCHNEIDER. OK. Well, that is all we have to rely on, are the experts, I am afraid.

Thank you, Mr. Chairman.

Mr. D'AMOURS. Thank you, Mr. Spaulding. Apparently my efforts to shortcut were only moderately successful. I guess that probably concludes the questions for you anyway, but I would appreciate your staying through Mr. Apollonio's testimony. There may be some followup questions to you.

Now, Mr. Apollonio, if you will, please.

STATEMENT OF SPENCER APOLLONIO, COMMISSIONER, MAINE
DEPARTMENT OF MARINE RESOURCES, AUGUSTA, MAINE

Mr. APOLLONIO. Thank you, Mr. Chairman, members of the committee.

My name is Spencer Apollonio. I am the commissioner of the Department of Marine Resources for the State of Maine. I will not read my testimony to the committee. I believe you have already been given copies.

Mr. D'AMOURS. Fine.

Mr. APOLLONIO. I would like to summarize it, however, and comment on one or two points, if I may.

Mr. D'AMOURS. We would appreciate that, Mr. Apollonio.

Before you begin, let me discharge one small matter. I would like to ask unanimous consent that any members desiring to submit further questions in writing may be allowed to do so. Hearing no objection, that will be so ordered and you may proceed.

Mr. APOLLONIO. Thank you, Mr. Chairman.

About 20 months or so ago, NOAA came to my department and asked whether we would be interested in making a proposal for a marine sanctuary on the coast of Maine. The reason given to us at that time was that it was desired that there be a sanctuary in the cold water habitat of the United States, and clearly if they wanted cold water they had to come to an area north of Cape Cod, so that gave them very few choices. After reviewing the intent of Congress with them, we were quite happy to undertake that activity, and in fact we have submitted a proposal for a sanctuary off the coast of Maine. Therefore, we have through that process of 20-odd months or so become familiar with the process and, we think, with the intent.

I think I was invited to appear at this hearing today, however, not because of that process but because of the problem which has been mentioned earlier this morning, that arose as the result of a proposal in Frenchman Bay. The point I would like to make about the reaction to that proposal, however, is that the committee should understand that in my judgment it is not a reaction against the program or the intent of marine sanctuaries. In my judgment the problem is specific to that particular proposal, and the reason I am confident in saying that is because the other proposal for the mid-coast Maine sanctuary has had no adverse reaction whatsoever, certainly none that we are aware of, and indeed it has achieved a reasonable amount of local and regional support. Therefore, we have to conclude from that that the sanctuary concept itself is acceptable.

I would just like to say that we do support the reauthorization of the sanctuary program. There are two reasons, fundamentally. We believe that it is important that the Nation preserve for future study, for future reference purposes, typical marine areas that can be assured of protection into the future. We cannot say exactly what that future need may be for those areas, but clearly society in the future will want to be able to refer to areas which have maintained their important characteristics with a minimum of disturbance.

I would like to make a point about funding, if I may also, Mr. Chairman, and that is a point that I have elaborated on in my testimony. It has become clear to me and a good many others in dealing with fisheries research that there is a gap in funding that is available for fisheries research, and the marine sanctuaries program as we understand it has the potential for filling that gap.

Money that is available for marine research from the Department of Commerce, from NOAA, from the National Marine Fisheries Service, to a large degree concerns single-species research—codfish or lobsters or scallops. On the other hand, the National Science Foundation will support research for ecosystems and how they function, but they will not support fisheries research.

What is needed for intelligent fisheries research is a study of how the fish and their environment interact. The marine sanctuaries program is the only program known to us that fills that gap, and I think that is an important point to be kept in mind. It is certainly one of the reasons why we are very interested in the program.

I would just like to summarize the three suggestions that I might make for the improvement of the program. Mr. McKernan, earlier on, suggested that the word "sanctuary" itself is an initial hurdle to be overcome, and sometimes the word itself stands in the way of any rational analysis or judgment or scrutiny of a proposal. Therefore, if it were possible to find a different word, I think that would be very helpful.

Second, the management plan that is proposed for a specific sanctuary should be spelled out at the beginning. The fact that an initial proposal is only described by area and in very general terms leaves the public—and in this case the fishing industry—the question of what is coming, what the implications are. Unless that is made clear at the beginning, there are going to be substantial problems with public relations, so we would suggest that any proposal submitted to NOAA include a rather detailed or rather specific management plan along with it. I think that would probably smooth the procedure.

Finally, we would suggest that the Governor have the power to veto an entire sanctuary proposal if all or part of it is within State waters. At the moment the law, as I understand it, reads that the Governor can veto that part of a proposal which is in State waters, but if it overlaps between State and Federal waters, that part which is in Federal waters remains. That does not make sense for two reasons: One, a proposal ought to be a coherent entity. If you chop it in half by Governor's veto it is no longer a coherent entity. There is something lacking in that logic there.

Second, that part which remains presumably would have the same objectionable characteristics that were the cause of the Governor's veto in the first place, so the part remaining still remains a source of concern and presumably potential trouble. Therefore, I think in that case the Governor's veto ought to extend to the whole sanctuary proposal.

Mr. Breaux made a proposal this morning that the Congress take over the job of designating sanctuaries. I do not think I am in agreement with that proposal. I think Congress should take another look, again, at the intended purpose of the sanctuary propos-

al, and possibly work on the language which would give us, the public, guidance as to what the Congressional intent is. As I mentioned to you, we had several hours of discussion with Dr. Foster when she came to Maine before we were clear what the congressional intent is. It took us some time to get comfortable with it, and I think that is an important job for Congress to undertake, but I think that NOAA can administer the program very adequately indeed if the congressional intent is refined, clarified, or possibly amended.

Thank you, Mr. Chairman.

[Material follows:]

PREPARED STATEMENT OF SPENCER APOLLONIO, COMMISSIONER, MAINE DEPARTMENT
OF MARINE RESOURCES, AUGUSTA, MAINE

Mr. Chairman and members of the committee, my name is Spencer Appollonio. I am Commissioner of the Department of Marine Resources in Augusta, Maine. My department is primarily responsible for the marine resources issues of Maine. We engage, as the single, primary instrument of the state, in all those aspects of marine resources research, development, management, and enforcement which concern the state's well-being. Our department in Maine is perhaps unique—at least on the Atlantic coast—in that our one agency maintains a coordinated program in all those state activities that relate to fisheries and marine resources in general. It is perhaps for this reason that we were asked by the Department of Commerce, perhaps 20 months ago, to develop a proposal for the designation of a Marine Sanctuary off the coast of Maine. After we fully explored and understood the Congressional intent for such sanctuaries, we had no hesitation in doing so, and as a result of the proposal process that we undertook, we are now in a position to comment on the concept of a Marine Sanctuary program.

But it is not because we have developed and submitted a proposal, I believe, that I am here today. Instead, I believe that I was asked, as the state's principal marine resources official, to speak at this hearing on marine sanctuaries because of concern that has developed in Maine in connection with the program. An independent proposal for a sanctuary in Frenchman Bay, Maine, has generated substantial local reaction, extensive newspaper publicity, overwhelming popular rejection of the specific proposal, and petitions to Maine's congressional delegation in opposition to the proposal. This reaction has raised questions about the validity of the concept and program itself. I believe that the popular reaction in Maine to that specific proposal is matched only by similar reaction in Alaska to a sanctuary proposal—and that nowhere else in the history of the sanctuary program has such popular concern or apprehension been raised. I should like to make it clear to the committee that to my knowledge the reaction in Maine that you may be aware of is specific to and confined to the Frenchman Bay sanctuary proposal. In contrast, the proposal that we developed for Mid-Coast Maine has generated no adverse reaction at all; instead it has received firm support from local and regional newspapers, from citizens in the area, and even a few letters of support from fishermen who as a rule do not write letters. Those fishermen that I have personally talked to about our proposal have no anxieties about it. Thus clearly the news from Maine is not about the philosophy or concept of marine sanctuaries; therefore it must be about a specific proposal and how it was presented.

Before suggesting some lessons that could be learned from that unfortunate incident, I would like to tell you why my department agreed to develop a proposal for a sanctuary. This should explain to you why we believe the program is important and should be continued. I preface our department's three specific reasons for developing a proposal by saying that the Congressional intent for the sanctuary program is most important: to preserve for the future representative marine systems in their natural state as baselines for comparative purposes and as areas which may be studied to fully understand how marine systems work. This is a great need in ocean science and one in which there is growing interest. It is in this larger context, then, that we in Maine have specific interests.

First, the Mid-Coast sanctuary in a sense would be a sanctuary for fishing; that is, within the sanctuary traditional, long-standing fishing practices would continue without regulation or interference from other possible uses of the area. We would not use the sanctuary concept to regulate fishing in the area. Instead, the sanctuary would be the means of insuring that fishing would continue without fear of disrupt-

tion from such incompatible activities as ocean dumping or sand and gravel mining, or other potentially disruptive but less likely possibilities. It would be an assurance to fishermen that in that area, at least, they could be sure that their fishing grounds and fishing practices would be guaranteed protection and preservation as fishing grounds.

Second, the sanctuary program carries a strong public education component—to educate the public as to the nature and significance of the marine habitat. We believe in that strongly. My department has for years supported a marine education program, from primary schools to adults, and we run a small but very popular marine aquarium in which we try to tell the public something of the importance of our fisheries and the marine environment upon which the fisheries depend. Ours is one of three very small aquaria north of Boston and, frankly, we hope that the sanctuary program will permit us to strengthen our aquarium so that we shall have an educational facility that can do justice to our marine environment which is so important to our coastal economy.

Third, our laboratories in Boothbay Harbor carry on active research programs into the productivity and fisheries of Maine waters. The sanctuary program could help to sustain those studies in a very appropriate fashion.

A purpose of the Marine Sanctuary program is to support research into the nature and functioning of marine ecosystems. As a fisheries agency, we are acutely aware that fish live in the context of their environment and as part of their environment; thus adequate understanding of fish for management purposes depends upon much better understanding of the ecosystem. This reality has been identified by the National Academy of Science, and our laboratory is committed to that research philosophy. Unfortunately, funds for the study of fish in the context of the ecosystem in which they live—a study essential for a sound basis for fishery management—are very scarce. We would commit research funds from the Sanctuary program to that purpose. Sanctuary funds could provide an essential bridge for the study of fish in relations to their environment. Limited funds are available from some agencies for the study of fish. And in other institutions funds are available for the study of ecosystems, usually without reference to fish. But there is no program at the moment that makes funds available for the coordinated study of both in relation to each other. The Marine Sanctuary Program can serve the nation's fisheries management efforts very well if sanctuary moneys can be made available for this purpose. There are of course other purposes of the program, but this is an important one in an area like Maine where fishing is an integral part of the marine environment and the economy.

Thus there are quite specific reasons why my department is submitting a sanctuary program—and we hope, of course, that our proposal will be successful.

Let me make some suggestions for improving the program. First, it needs a new name. The word Sanctuary evokes all the wrong images among fishermen. The word itself is sufficient to lead fishermen to conclude that there would be no fishing within the area. This reaction was very clear in 1978 when Georges Bank was proposed as a sanctuary to give additional environmental protection to the fisheries because of oil exploration and drilling ventures on the Banks. But principal fisheries spokesmen wanted no part of the proposal even though they did want the protection it would have given them. The word Sanctuary itself turned them off. More recently, an Estuarine Sanctuary proposal received short shrift at the hands of fishermen in eastern Maine, and again the word Sanctuary fared poorly in the proposal to defeat.

I can't be sure that the term Sanctuary itself was the key to the public reaction to the Frenchman Bay proposal; a number of problems coalesced to create that response. But I believe that the term Sanctuary has only confirmed the suspicions created by those other elements. The term Sanctuary evokes the wrong first impressions among fishermen such that a proposal can not be sure of a neutral or open-minded first hearing. The word Sanctuary itself creates an initial first hurdle that any proposal must overcome before its specific merits can be considered.

Second, the present designation procedure requires that a proposal shall at first only describe an area and state why it should be a sanctuary. It does not call for the management policy or plan to be made clear very early in the process. Thus the public first learns of a proposal when it can be judged only in very general terms. A major public relations problem lies in the lack of detailed management plans and proposed regulations at the recommendation stage. The guidelines for preparing a recommendation called for a very general approach to sanctuary management. We followed this approach in our preparation. However, many of the criticisms or questions coming to us from the public are based on a lack of firm statement as to how the sanctuary would be used and what regulations would be required to attain or maintain sanctuary status.

According to the processing schedule, the determination of a management plan and the necessary regulations would not occur until the Assistant Administrator for NOAA was preparing the Draft Environmental Impact Statement (in consultation with federal, state and local officials.) This step also occurs after the Public Workshop. I can see that the same critical questions would arise at the Public Workshop, and the proponents would still have no management plan or proposed regulations, nor would the public be in a better position to react to or judge the proposal.

I recommend that sufficient guidelines be furnished initially, and sufficient thought and planning be carried out at the initial recommendation stage, so that a complete package proposal will be offered, including management plans for the area, and the regulations necessary to implement the sanctuary. This initial proposal should be open to changes, based on the results of the Public Workshop and hearings, but at least would have stated plans to work with.

Fishermen in particular want specifics. They want to know at the beginning how the specifics will affect them, because a general proposal, left vague in the beginning, could later put them out of business. They will not acquiesce to or be receptive to a proposal from which such specifics are omitted. I feel sure that it is this high degree of uncertainty as to the specific details and consequences of a sanctuary that caused much of the reaction to the Frenchman Bay proposal. The fishermen found themselves confronted with a new and initially suspect concept which contained an apparently strong probability of unspecified regulation, and apparently to be administered by unknown and unapproachable persons in Washington. The fishermen of the area therefore could see no benefits and only potential for great injury in the proposal.

Further, the 1979 guidelines for proposal submissions make no mention of an agency responsible for enforcement of regulations. The 1980 Amendment gives primary responsibility to the Coast Guard, with the possibility of the Secretary of Commerce utilizing state or other jurisdictional agencies. It would seem preferable, for a sanctuary wholly or partially located in state waters, to give primary enforcement responsibility to the appropriate state agency with the Coast Guard serving as back-up and for waters outside state jurisdiction.

I would also suggest that if a proposal is adjacent to and includes substantial state waters, then the Governor of the affected state should have veto power over the entire proposal, not just that part which lies within state waters as the law presently provides. Presumably a proposal is a coherent entity. If a substantial part is unacceptable, then the entirety ought to be unacceptable not only because the cohesion would be lost, but also because that part adjacent to but beyond state waters would have important impacts on activities within state waters. I do not suggest that Governors should have such veto power over proposals that lie miles outside of territorial waters—at the outer edge of the Continental Shelf, for example.

It is our conclusion that the controversy in eastern Maine arises from the manner of presentation and the nature of the specific sanctuary proposal and that the committee should not conclude that the controversy is a judgment on the sanctuary concept itself. My department's understanding, after nearly two years spent in developing a proposal, is that the Sanctuary program serves a very valid national purpose and can help to meet very valid regional and national needs in the ocean environment. Appropriately designed and properly explained, a sanctuary proposal can receive local support because the benefits of an appropriately conceived proposal can be self-evident to the public and to those directly affected.

We believe a good program can be improved by increasing the specificity or the administrative details of a proposal when it is initially submitted, by clarifying in the beginning the expected or intended administrative agency, and—to assure the affected public of the validity of strength of state control—by increasing the veto power of Governors over sanctuary proposals in and adjacent to state waters.

Thank you for the opportunity to speak to this committee.

Mr. D'AMOURS. Thank you, Mr. Apollonio. I very much appreciate that last comment. You are absolutely correct. This congressional intent has become rather topsy-turvylike in the case of this particular law, and I agree with you that it does need further clarification.

On the point you made relative to the Governor's veto, under the current system, if the Governor does exercise his option to veto the State waters part of the sanctuary, then the entire sanctuary can be withdrawn from designation by NOAA if it decides that the gu-

bernatorial action does in fact destroy the integrity or the purpose of the designation. You do not think that that is a sufficient option?

Mr. APOLLONIO. I suspect that it may be in a substantive sense, in that probably NOAA would withdraw such a designation, but I am thinking about it from the point of view of trying to sell the concept to the people in the State. They say that the Governor has veto only over part of it; they are not reassured, really, and as has been mentioned before, the public sometimes does not trust us in Government, whether it is the State or Federal level. Therefore, I think——

Mr. D'AMOURS. Go ahead.

Mr. APOLLONIO. Well, I think if the veto power then extended to the whole proposal, whether it was inside or outside of State waters, the public would be much more reassured that they indeed had important input into the decision.

Mr. D'AMOURS. The same problem attaches, of course, to the congressional veto, since the congressional veto can apply to only some of the criteria or the purposes of the designation there could be a case made for allowing NOAA to retain the decisionmaking as to whether or not the gubernatorial veto does or does not impede in significant part the purpose of the designation.

I have no further questions at this time.

Mr. McKernan, do you have any questions of the witness?

Mr. McKERNAN. Yes, I do, Mr. Chairman. Thank you.

I would like to point out first of all that Mr. Apollonio is one of my constituents. We have not been able to convince him to enroll in the right party, however.

Mr. APOLLONIO. I thought I was.

Mr. D'AMOURS. I thought you had.

Mr. McKERNAN. However, we are pleased to have you here anyway, Spencer.

Mr. APOLLONIO. Thank you.

Mr. McKERNAN. I also want, just for the record, to make sure that people understand that Spencer is very well respected, and I am pleased that he has been able to give us the benefit of his testimony today.

I would like to just ask you, if I could, to elaborate a little bit on the problems in Frenchman Bay. Specifically, if you could address how we might be able to change NOAA's procedures to avoid similar problems in the future. Frenchman Bay, I might point out, is not in my district. However, I am very familiar with that area and I can tell you that even though I do not represent that area, I have received a lot of correspondence on that particular proposed designation.

Mr. APOLLONIO. I am frankly not sure that the process can be changed to solve that problem. Congress started off with the intent that anybody should be able to submit a proposal for a marine sanctuary, and the public reaction took place in Frenchman Bay, as I understand the sequence of events, prior to NOAA in fact receiving the proposal. Therefore, we cannot fault the NOAA process for what happened there.

I think the problem really lay in the proposal itself or the public perception of the proposal, which they became aware of at least

concurrently or even before NOAA itself saw the proposal. If, then, the public is to have the option—as I think it should—of being able to make proposals for sanctuary designation, then the program runs that risk that there will be an outcry and possibly a rejection before NOAA itself gets involved, and before the NOAA process of review and selection and evaluation and public hearing occurs.

I am not sure that you can do anything about it as long as anybody has the right, as I believe they should, to make a proposal. If the public has a right to make a proposal, it has a right to tell the people in the area what that proposal is, and the public is going to react one way or another at that time. They are not going to wait to see what NOAA says, and I think that is an inherent risk. It simply may be that that can only be overcome through public education about the program and how it is handled, with time. You just may need time to get the public to be comfortable with the concept and to understand that the NOAA public hearing process, I believe, is going to protect their rights.

Mr. McKERNAN. What do you think the reason was for the difference in the response from the mid-coast area and Frenchman Bay?

Mr. APOLLONIO. Again, I can only speculate because I was not directly involved in what happened in Frenchman Bay, but we made it very clear in the mid-coast proposal that fishing was not going to be regulated. That was not the intent of the mid-coast proposal.

However, as I read the newspapers from the Frenchman Bay area, there was a very clear implication, a very strong implication that there was going to be fisheries regulation as a result of that proposal. That may have been an incorrect perception but it was certainly a perception, and I think the public then took the next step, saying, "It is going to be Washington that is going to be regulating us," and that did not set well at all.

Mr. McKERNAN. You are much more familiar with this than I am, but I believe Mr. Tweedt indicated earlier that under this program there was a potential for another level of Federal management, and that in addition to that, commercial fishing could be prohibited in these areas.

Mr. APOLLONIO. The potential is certainly there, Mr. McKernan, because the act itself, as I recall, does not rule out any kind of regulation. However, the protection is also there to the public, in that the act says that the designation shall specify that which is going to be regulated in the area. We tried to avoid the problem that occurred in the Frenchman Bay area by making it very clear at the beginning that the designation was going to say, "no fishing regulation."

Therefore, as I indicated earlier, I think a successful proposal is going to have to indicate very early what is going to happen and what is not going to happen in an area.

Mr. McKERNAN. One of your proposals in your statement was that we find a way to specify exactly what the program is going to be early-on. Have you talked to any of the NOAA officials about how that might be implemented?

Mr. APOLLONIO. I think the—the regulations?—the administrative procedures might be revised to do that. It seems to me that would be compatible with the language of the act right now, and it

becomes not a congressional matter but an administrative matter. I am confident it could be done.

Mr. McKERNAN. Thank you.

Thank you, Mr. Chairman.

Mr. D'AMOURS. Thank you, Mr. McKernan.

Mr. Spaulding, I have one more question that Mr. Anderson wanted me to ask you, which I did not get to because my time had expired. That is, what are the industry estimates of the oil and gas reserves within the sanctuary?

Mr. SPAULDING. I assume, Mr. Chairman, you mean the Santa Barbara Channel Islands Marine Sanctuary?

Mr. D'AMOURS. I assume that is what he means, yes.

Mr. SPAULDING. They are substantially larger than the estimates that were made by the United States Geological Survey. I believe those original estimates by the Survey were on the order of millions of barrels, and estimates made by competent professional geologists within the petroleum industry are as much as 100 times that.

Mr. D'AMOURS. 100 million barrels?

Mr. SPAULDING. 100 million barrels, I believe, is one estimate that has been made.

Mr. D'AMOURS. By the industry?

Mr. SPAULDING. Yes, by a geologist within the petroleum industry.

Mr. D'AMOURS. Thank you very much, the both of you, for your attendance and for your testimony. It was helpful and we appreciate it.

Mr. SPAULDING. Thank you, Mr. Chairman.

Mr. APOLLONIO. Thank you.

Mr. D'AMOURS. Our next witnesses are a panel composed of Ms. Sherrard Coleman Foster, the Director of Marine Issues Project, Defenders of Wildlife, and Mr. Michael Weber, Marine Habitat Director, Center for Environmental Education.

We welcome you both and eagerly await your testimony.

STATEMENT OF MS. SHERRARD COLEMAN FOSTER, DIRECTOR, MARINE ISSUES PROJECT, DEFENDERS OF WILDLIFE

Ms. FOSTER. Thank you very much.

Chairman D'Amours, dwindling members of the sub-committees, I appreciate very much the opportunity to testify today concerning the reauthorization of title 3. I will try to be brief.

The product of title 3—which is, of course, the national marine sanctuary program—now enters its second decade of existence, and at this time of reauthorization it is certainly appropriate to assess its objectives, its procedures, its problems, and its future.

Back in 1972, title 3 was the final result of approximately 11 bills which were introduced into the House of Representatives during 1968, all of which expressed a growing concern about the degradation of the offshore and coastal environments. Title 3, then and now, however, represents much more than an effort to prevent environmental degradation to ocean and coastal areas. From its very inception, the statute was also intended to provide for the maximizing of human benefits and uses in these areas. So it is that a major

increment of the program is also the comprehensive management—aided by research and educational programs—of sanctuary areas. Certainly scientific research and public interpretive programs are obviously vital elements to insuring the continued integrity of sanctuaries' resources.

By the end of this decade, it is estimated that approximately 75 percent of this Nation's population will be living within the coastal zone of this country. In addition, millions of persons will annually visit our warm beaches and rocky shorelines to enjoy swimming, boating, diving, fishing, or simply lying on the beach.

By that same time, of course, diversified pressures on coastal waters will also be greatly increased, including needed offshore energy development, commercial fisheries development, and shipping traffic attendant to these and other activities. These commercial and recreational activities and their potential effects on the marine environment speak to an element of the program which makes it unique among a myriad of other environmental legislation.

The program is designed to comprehensively manage and preserve for future generations, distinctive ocean ecosystems. In doing so, the program fills existing holes in the protective coverage offered by other statutes.

Achieving these objectives does not mean closing off these areas to all commercial and recreational uses. Rather, the program identifies anticipated detrimental activities in such areas and regulates only to the extent that other existing legislation does not.

I think it is fair to say that the program did get off to a slow start. Although the program was established in 1972, by 1977 only two small areas had been designated. In that year, however, the administration committed itself to a more vigorous pursuit of marine sanctuary designations, and in response to a call for nominations from States and from the public of possible candidates for marine sanctuary status, the program received over 100 such nominations. These became the now-infamous list of recommended areas, or LRA.

Although the program's attempts to solicit suggested sites were well-intentioned, and although many of these sites were in fact well qualified for further consideration, it is true that specific guidelines or criteria were not especially well formulated at that point. The result was an LRA which consisted of some totally unacceptable recommendations for marine sanctuary designation.

The first proposal selected from that LRA was the Flower Garden Banks coral system in the Gulf of Mexico. Although this site was well qualified for further consideration, intense objections from the oil and gas industry effectively stopped progress on the site. These early conflicts also clouded the future of two California proposals, at Point Reyes and also at Channel Islands, during 1980.

The oil and gas industry continued to claim that huge portions of the Outer Continental Shelf would be locked up through sanctuary designations. Progress was further complicated by the Department of the Interior, which claimed exclusive jurisdiction and regulation over all Federal activities occurring on the OCS. In the end, it was due only to massive public, State, and congressional support that the two California sanctuaries were finally designated by former

President Carter. The designation, however, did not resolve the arguments of the oil and gas industry, nor was the Department of the Interior especially mollified by the final designations.

Defenders—as, I believe, the staff of the program—maintains that because of its multiple use and balanced approach to management, the marine sanctuaries program is not duplicative, nor is it unduly restrictive in nature. Further, the Outer Continental Shelf is not about to be closed off to all or even significant development. The present prohibitions on oil and gas development at Channel Islands and Point Reyes involve an area encompassing approximately one-tenth of 1 percent of the total acreage of the OCS. Reasoned and timely development of the OCS's hydrocarbon resources certainly needs to occur, but industry does not necessarily need to have unlimited access to recognized sensitive areas.

There were two additional sanctuaries designated during 1980 which have been mentioned previously: The reef system at Looe Key, Fla., and the hard-bottom reef located at Gray's Reef, Ga. Therefore, the sanctuary system now consists of six designated areas.

I think it is important to note in passing that all of these proposals evolved from the desires of State governments, who understand the benefits of marine sanctuary designation to State and local communities. The concepts embodied in the national marine sanctuary program are worthwhile, and they are needed, as the diversity and the pace of offshore and coastal development increase. Recognizing that the program would be significantly strengthened by the establishment of a clearly stated mission and more specific criteria for sanctuary designation, program personnel have devoted much of the last 2 years to developing the Program Development Plan, or PDP. This document, as you well know, provides the policy and administrative framework for the program, and in the effort also attempts to eliminate any existing confusion concerning where the program is headed, how it intends to get there, and what the final product is anticipated to be.

The stated mission is very straightforward, and I quote: "The establishment of a system of national marine sanctuaries based on the identification, designation, and comprehensive management of special marine areas for the long-term benefit and enjoyment of the public." An entirely new nomination and designation process has been initiated, coupled with specific site identification and evaluation criteria. Increased emphasis is also given to site-specific management plans and to interagency coordination, research, public awareness, and interpretive programs.

To implement this process, a number of steps have been taken, as already mentioned earlier by Mr. Tweedt. Briefly, these include the elimination of the LRA and the establishment of eight regional resource evaluation teams, consisting of persons in the private sector with special expertise in marine resources or systems. The work of the eight regional resource teams is at the point now of being forwarded to NOAA, who will review the teams' site recommendations, eliminate any that may be deemed inconsistent with the program's objectives, and finally submit a draft site evaluation list, or SEL, to the public for further comment.

A final SEL, consisting, I believe, of approximately 35 sites, is anticipated by early 1983. The final SEL will form, in effect, a pool of highly qualified nominated sites from which NOAA will systematically select sites to become active candidates and to be evaluated in further detail as potential marine sanctuaries.

The other step that was taken to improve the program was that site-specific management plans will now be developed along with the site designation proposal, so that public input on the real effects of sanctuary designation may occur earlier and in more detail.

The sanctuary program is presently nearing completion of its draft SEL, as I mentioned. It is, I think, not surprising that there have been some problems along the way. After all, it was an entirely new process imposed upon a program already underway, and there have been some stumbling blocks.

Of the eight regional teams, real problems have emerged on two, as we have heard earlier: the North Atlantic Team and the Alaska Team. I think the problems generally have been those of poor or inadequate communication and involvement of the public, and misinformation or in fact misunderstanding of the teams' and the program's intentions. While these occurrences are certainly unfortunate, Defenders does not believe that the integrity of the program has been undermined by these mistakes. The objectives are sound; the implementation simply must be better in some instances.

Of the approximately 75 suggested sites which Defenders and others have reviewed, we believe many are truly wondrous places. I think the teams have, by and large, done a commendable job. The resources that are being considered in all of these sites span the full range of one's imagination: Tropical coral reef systems; bay/ocean systems, fostering shellfish, crustaceans, finfish, sea turtles, rare shore birds; whale and dolphin feeding areas; lagoonal/mangrove systems; and Great Lake waterfowl and inland fisheries systems. The work to be accomplished by NOAA is truly an awesome task.

Further, Defenders believes that in looking at the future of the program, neither local communities nor the oil and gas industry should be fearful or suspicious of the "new" National Marine Sanctuary Program. The procedural refinements now being implemented will guarantee early and continued public involvement in the process, and the more clearly defined guidelines and program parameters will also guarantee more than reasonable access to the OCS.

Defenders is enthusiastically supportive of the program and the promise it holds for all of us. The procedural problems encountered are small indeed in comparison to the magnitude of the challenge. It is past time to get on with the business of meeting that challenge, and to that end, Defenders urges that title 3 be reauthorized for a minimum of 3 years.

Regarding funding of the program, Defenders asks these subcommittees to bear in mind the following: Research and interpretive programs are integral to good management. These simply cannot be realized without at least a small increase in funding. This organization therefore proposes funding at \$3 million for fiscal 1984, \$3.5 million in fiscal 1985, and \$4 million in fiscal 1986.

I thank you very much for your time.
[Material follows:]

PREPARED STATEMENT OF SHERRARD COLEMAN FOSTER, DIRECTOR, MARINE ISSUES
PROJECT, DEFENDERS OF WILDLIFE

At the invitation of the House Subcommittee on Oceanography, Defenders of Wildlife ("Defenders")¹ is pleased to submit the following statement regarding reauthorization of Title III of the Marine Protection, Research and Sanctuaries Act of 1972 (the "Act").

I. INTRODUCTION

The product of Title III—the National Marine Sanctuary Program—is now entering its second decade of existence. At this time of reauthorization, an assessment of the Program—its objectives, its procedures, its problems, and its future—is most certainly appropriate.

In 1972, Title III was the final result of eleven separate bills introduced into the House of Representatives during 1968.² Fourteen years ago, these documents expressed a growing concern over increasing evidence of degradation of offshore and coastal environments. The House report accompanying its bill expressed the need to address these problems:

Title III deals with an issue which has been of great concern to the Committee for many years: the need to create a mechanism for protecting certain important areas of the coastal zone from intrusive activities by man. This need may stem from the desire to protect scenic resources, natural resources or living organisms; but it is not met by any legislation now on the books * * * The pressures for development of marine resources are already great and increasing. It is never easy to resist these pressures and yet all recognize that there are times when we may risk sacrificing long-term values for short-term gains. The marine sanctuaries authorized by this bill would provide a means whereby important areas may be set aside for protection and may thus be insulated from the various types of 'development' which can destroy them."³

But Title III then and now represents much more than an effort to prevent environmental degradation of ocean and coastal areas. From its inception, the statute was also intended to provide for the maximizing of human benefits and uses in sanctuary areas. This intention was emphasized in the legislative history:

I must admit that the word sanctuaries carries a misleading connotation. It implies a restriction and permanency not provided in the title itself. Title III simply provides for an orderly review of the activities on our Continental Shelf * * * It provides a balanced even-handed means of prohibiting the resolution of one problem at the expense of the other. It guards against 'ecology for the sake of ecology.' It also guards against the cynical philosophy that the need for oil is so compelling that it justifies the destruction of our environment.⁴

Let me reemphasize the fact that marine sanctuaries as proposed in Title III of this legislation are not intended to prevent legitimate uses of the sea. They are intended to protect unique areas of the ocean bordering our country * * * A sanctuary is not meant to be a marine wilderness where man will not enter. Its designation will insure very simply a balance between uses.⁵

So it is that a major increment of the Program then and now is also the comprehensive management, aided by research and educational programs, of sanctuary areas. Scientific research and public interpretive programs are obviously vital elements to ensuring the continued integrity of sanctuaries' resources, particularly as ever-increasing recreational and commercial uses are imposed upon these areas.

¹ Defenders of Wildlife is a national, non-profit, tax-exempt organization with a membership of over 58,000 citizens nationwide, and is dedicated to the protection of the nation's wildlife resources and the natural environment.

² Center for Natural Areas, "An Assessment of the Need for a National Marine Sanctuaries Program, Phase I of: Study of the Framework of the Marine Sanctuaries Program," Contract No. CNA/OCZM 7-35118, Apr. 11, 1977, p. 32.

³ H.R. Rep. No. 92-8671, 92d Cong., 1st Sess., p. 15 (1971).

⁴ Congressman Keith Hastings, R-Mass. Cong. Rec. H-8190-1, Sept. 8, 1971.

⁵ Congressman Thomas Pelly, R-Wash. Cong. Rec., H-8232, Sept. 8, 1971.

II. PROGRAM BENEFITS

By the end of this decade, it is estimated that 75 percent of the nation's population will be residing within the coastal zone (up to 50 miles inland).⁶ Millions of persons in addition will annually visit our seashores' warm beaches or rocky shorelines, to enjoy swimming, boating, diving, fishing, or simply "breathing the salt air." By that same time, diversified pressures on coastal waters will also be greatly increased, including offshore energy development, commercial fisheries development, and shipping traffic attendant to these and other activities. These commercial and recreational activities and their potential effects on the marine environment speak to an element of the Program which has not as yet received the attention it deserves.

It is perhaps this element which makes Title III unique among a myriad of other environmental legislation. The Program is designed to comprehensively manage and preserve for future generations distinctive ocean ecosystems. In doing so, the Program fills existing "holes" in the protective coverage offered by other laws. Achieving these objectives does not mean closing off special areas to all commercial and recreational uses. Rather, the Program identifies anticipated detrimental activities in such areas; recognizes the changing needs of such areas; and remains sensitive to local states' interests in such areas. The result is a Program whose purpose is both the comprehensive protection of distinct ecosystems, and the active encouragement of their wise use and enjoyment.

The value of this all-encompassing consideration of marine environmental protection has been recognized in a number of studies. For instance, the Center for Natural Areas found that:

Title III . . . became the first, to date the only broadbased, comprehensive federal legislation capable of striking a balance between the need to develop and utilize and the need to protect and conserve the nation's marine resources.⁷

These findings were later echoed in two additional analyses of the Program:

The marine sanctuaries provision is an environmental protection law that has offers [sic] a positive approach to protection of marine areas of recognized importance. It is a multiple-use provision that was designed to protect a site, rather than stop certain activities or eliminate adverse impacts."

Without the sanctuary provision, sites could only be protected indirectly (and probably less completely) through a maze of federal programs. . . . the long-term protection or restoration of marine sites for conservation, recreational, ecological or esthetic values without the direct approach of a sanctuary program is likely to be * * * difficult.⁸

And:

Title III authorizes the only Federal program to comprehensively manage and protect marine areas as units * * *.

* * * if comprehensive protection of the marine environment is desired in selected areas; that is, if certain areas merit special treatment, whether due to unique characteristics or recreational value or some other pertinent factor, Title III would seem to be an appropriate way to provide it to accomplish the basic objectives the Congress envisioned in establishing an effective marine sanctuaries program.⁹

This country's past efforts to protect the marine environment have resulted in a series of regulatory authorities which are primarily single-purpose in nature. Among these are:

The Fishery Conservation and Management Act of 1976, which is designed to conserve and manage commercial and sport fishery resources. Regional fishery management councils are established to accomplish these objectives through regulations. The Act does not, however, extend to non-commercial resources.

The Outer Continental Shelf Lands Act Amendments of 1978 limit environmentally protective measures to oil and gas-related activities at individual sites. It does not cover oil and gas-related spills resulting from tanker collisions, for instance.

The Federal Water Pollution Control Act Amendments of 1972 regulate the discharge of pollutants (including oil and other hazardous substances) into state waters, the "contiguous" zone (from state waters, or 3 miles, outward to 12 miles from the U.S. coastline), and the ocean beyond. However, the Act applies only to

⁶ Natural Resources Defense Council, "Paving the Way for Coastal Development: Resource Management and Waste of Tax Dollars," October 1980, p. 9.

⁷ Center for Natural Areas, p.37.

⁸ Congressional Research Service, "The Contribution of Marine Sanctuaries Provision to Environmental Management," Feb. 14, 1980, pp. 12-13.

⁹ General Accounting Office, "Marine Sanctuaries Program Offers Environmental Protection and Benefits Other Laws Do Not," CED-81-37, Mar. 4, 1981, pp. 12, 22-23.

discharges into navigable waters that can additionally be proven an imminent and significant danger to public health and welfare. It does not consider the health and welfare of specific marine ecosystems.

The Port and Tanker Safety Act of 1978 mandates the Coast Guard to reduce tanker and tank barge pollution through improved design and construction standards.

The Deepwater Port Act of 1974 provides for protection of marine and coastal environments only to the extent of preventing or minimizing possible adverse impacts of deepwater port development activities.

Sometimes—especially when viewed from the perspective of achieving a particular or singular objective—the purposes of these laws come into apparent conflict. This perceived conflict has sometimes been a stumbling block to the smooth and timely implementation of the Program's objectives. Defenders of Wildlife steadfastly believes that conflicts in these areas need not exist. With proper management, all reasonable uses of the ocean can be accommodated without sacrificing the integrity of areas critically important to marine species and to human livelihoods and enjoyment. With responsible leadership, the various statutes affecting control of marine activities can be implemented in a complementary fashion, without overlap or conflict.

III. PROGRAM IMPLEMENTATION: EARLY PROGRESS AND RECENT MODIFICATIONS

Although the Program was established in late 1972, no marine sanctuaries were designated until 1975. During that year, two areas were set aside: a one-square-nautical mile area surrounding the *Monitor*, a Civil War ironclad warship sunk in 1862 off the coast of Cape Hatteras, North Carolina; and a 20-mile-long section of coral reef off the southern Florida coast. In both cases, the sanctuaries were rather limited in scope due primarily to the nature of the resources being preserved.

The Program received little or no attention until 1977, when the Carter administration committed itself to a more vigorous pursuit of marine sanctuary designations. In response to a call for nominations from states and public of possible candidates for marine sanctuary status, the Program received over 100 suggestions. These became the Program's "List of Recommended Areas," or "LRA." Although the Program's attempts to solicit suggested sites were well-intentioned, and although many of the suggestions were in fact well-qualified for further consideration, it is true that specific guidelines or criteria were not well-formulated at that point. The result was an LRA consisting of some totally unacceptable recommendations for marine sanctuary designation.

Among the sites deemed worthy of further consideration was a biologically unique coral system, known as the Flower Garden Banks, located off the coasts of Louisiana and Texas, in the Gulf of Mexico. The nomination was originally offered in 1973 by Texas State Senator A. R. ("Babe") Schwartz, and later re-submitted in 1977 in conjunction with the Texas Coastal and Marine Council. The site was elevated to "Active Candidate" status in 1978. The Flower Garden Banks coral reefs, incorporating over 350 known species, are well-known and admired by sport divers, but little understood scientifically. They are the only well-developed, tropical coral reefs in the northwest Gulf of Mexico. They are also among the last relatively pristine reefs remaining in U.S. waters, due to their distance from shore (approximately 110 nautical miles south-southeast of Galveston).

Almost from its inception, however, progress on the proposal was stymied by intense objections from oil and gas development interests. Although numerous concessions were made to accommodate these interests, including allowing hydrocarbon operations in the area, regulatory conflicts emerged which effectively stopped further progress on sanctuary designation. The site was removed from Active Candidate status in 1982.

The effect of conflicts surrounding the Flower Gardens proposal unfortunately, clouded the future of other proposed designations during 1980. Two Program proposals during that year involved areas off the California coast which were also of interest to the offshore oil and gas industry: the Channel Islands ecosystem, off the coast of Santa Barbara, and the Point Reyes/Farallon Islands ecosystem, off of San Francisco.

Both of these areas are of tremendous importance to a variety of marine species, including migratory great whales, seals, sea otters, and hundreds of nesting sea bird species. The waters are biologically rich, providing shelter and food to the many fish species which in turn sustain bird and marine mammal populations, as well as supporting a healthy commercial fishing industry. At the end of lengthy public participation processes, both final proposals included prohibitions on future oil and gas de-

velopment activities within sanctuary boundaries. At this point, the future of the Program itself became seriously threatened not only by the oil and gas industry, which claimed huge portions of the OCS would be "locked up" by sanctuary designations, but also by the Department of the Interior (DOI), which claimed exclusive jurisdiction and regulation over all Federal activities occurring on the Outer Continental Shelf.

Due primarily to massive public, state, and Congressional support, the two California sanctuaries were finally designated by former President Carter with the prohibitions on oil and gas development operations intact. Presidential designation, however, did not resolve the arguments of the oil and gas industry that large portions of the OCS would be closed off to development by future sanctuary designations. Nor was the Department of the Interior especially mollified by the final designation action.

Defenders, as well as the Program's staff firmly maintain that, because of its multiple-use, ecosystem approach to management, the Marine Sanctuary Program is not duplicative or unduly restrictive in nature. The General Accounting Office has also agreed:

* * * the marine sanctuaries program, . . . is providing, or has the potential to provide, marine environmental protection over and above that which is or can be provided under other Federal statutory authorities.¹⁰

Further, the OCS is not about to be closed off to all, or even significant, development. Reasoned and timely development of the OCS's hydrocarbon resources needs to occur. The potential for oil and gas reserves in a given area is among the possible uses examined by the Program during its consideration of that area for sanctuary designation.¹¹

Two additional National Marine Sanctuaries were designated during 1980: a five-square-nautical mile section of the spectacular coral reef system at Looe Key, Florida; and a 16.68-square-nautical mile area around the "hard bottom" reef system at Gray's reef, Georgia. Both areas will be the subject of research and monitoring efforts, which will answer many questions about the complexities of reef systems and the habitats they provide for other marine organisms. The public will continue to enjoy these areas for their extensive recreational opportunities.

It is important to note that all of these proposals evolved from the desires of state governments, who understand the benefits to the state and local communities of National Marine Sanctuary designation. The day-to-day management of a sanctuary is a cooperative, on-site venture, usually planned through the state department of natural resources.

The concepts embodied by the National Marine Sanctuary Program are worthwhile, and they are needed, as the diversity and pace of off-shore and coastal development increases. Recognizing that the Program would be significantly strengthened by the establishment of a clearly stated mission and specific criteria for sanctuary designation, Program personnel have devoted much of the last two years to developing and implementing the "Program Development Plan," (PDP).

The PDP provides the policy and administrative framework for the Program, and thus attempts to eliminate any existing confusion concerning where the Program is headed, how it intends to get there, and what the final "product" is anticipated to be. The stated mission is straightforward: "the establishment of a system of national marine sanctuaries based on the identification, designation, and comprehensive management of special marine areas for the long-term benefit and enjoyment of the public."¹² An entirely new nomination/designation process has been initiated, coupled with specific site identification and evaluation criteria. Increased emphasis is given to site-specific management plans, and to interagency coordination, research, public awareness and interpretive programs. To implement this process, a number of steps have been taken:

(1) The "List of Recommended Area" (LRA) has been eliminated. Because there were no definite criteria with which citizens or organizations were familiar, many nominated areas on the LRA were unacceptable as sanctuary candidates. The LRA had also caused substantial confusion regarding the status of areas nominated and the likelihood of eventual designation.

¹⁰Ibid., p. i.

¹¹General Accounting Office, "Impact of Regulations—After Federal Leasing—On Outer Continental Shelf Oil and Gas Development," EMD-81-48, Feb. 27, 1981, p. 32.

¹²U.S. Department of Commerce, National Oceanic and Atmospheric Administration, Office of Coastal Zone Management, "National Marine Sanctuary Program, Program Development Plan," January 1982, p. 11.

(2) Eight regional resource evaluation teams, consisting of persons in the private sector with some particular expertise in marine resources or systems, were established to assist in the initial identification and evaluation of possible sanctuary sites in eight geographic regions. Following preliminary selection of several priority sites, the teams' recommendations were submitted for public comment; any additional nominations were also solicited from the public. Incorporating public comments and suggestions, each team submitted any changes or additions to the public for further comment. Following a second team review of comments received, final lists of recommended areas for further consideration were submitted to the National Oceanic and Atmospheric Administration (NOAA).

(3) NOAA will review the teams' recommendations, eliminate any that may be deemed inconsistent with the Program's objectives, and submit a draft "Site Evaluation List" (SEL) to the public for further comment. A final SEL, consisting of approximately 35 nominated sites, is anticipated by early 1983. The final SEL will form a pool of highly-qualified nominations, from which NOAA will systematically select sites to become "Active Candidates," and be evaluated in further detail as potential marine sanctuaries.

(4) Site-specific management plans will now be developed along with the site designation proposal, so that public input on the real effects of sanctuary designation may occur earlier and in more detail.

The Sanctuary Program Office is presently nearing completion of its draft SEL. It is perhaps not surprising that an entirely new process imposed upon a program already underway, has caused some stumbling blocks along the way. Of the eight regional resource evaluation teams, real problems have emerged on two: the North Atlantic team and the Alaska team. The problems have generally been those of poor or inadequate communication and involvement, and misinformation or misunderstanding of the Program's (and the teams') intentions. In Alaska, the extent of these problems was sufficiently serious to prompt NOAA to shut down the process in that region until complete understanding and agreement is reached regarding possible future sanctuaries in Alaska. While these occurrences are certainly unfortunate, Defenders does not believe the integrity of the Program has been undermined by these mistakes. The objectives are sound; the implementation simply must be better in some instances.

Of the approximately 75 sites which Defenders has reviewed, many must be truly wonderful places indeed. Resources span the full range of one's imagination: tropical coral reef systems to bay/ocean systems fostering shellfish, crustaceans, finfish, sea turtles, and rare shore-birds to whale and dolphin feeding areas to lagoonal/mangrove systems to Great Lake waterfowl/inland fisheries systems. The work to be accomplished by NOAA is an awesome task.

IV. THE FUTURE

Neither local communities nor the oil and gas industry should be fearful or suspicious of the "new" National Marine Sanctuary Program. The procedural refinements now being implemented will guarantee early and continued public involvement in the process; and the clearly-defined guidelines and program parameters will also guarantee more than reasonable access to the OCS.

Defenders is enthusiastically supportive of the Program and the promise it holds for all of us: a comprehensively managed system of National Marine Sanctuaries, each of which is unique or particularly representative marine ecosystem worthy of preserving for the future use and enjoyment by the public. The procedural problems encountered are small indeed in comparison to the magnitude of the challenge. It is past time to get on with the business of meeting that challenge, and to that end, Defenders urges that Title III be reauthorized for a minimum of three years. Regarding funding for the Program, Defenders asks these Committees to bear in mind the following: research and interpretive programs are integral to good management. These simply can not be realized without at least a small increase in funding. This organization therefore proposes funding of \$3 million in fiscal year 1984; \$3.5 million in fiscal year 1985; and \$4 million in fiscal year 1986.

Mr. D'AMOURS. Thank you, Sherrard, for your testimony. I note your point that the committee attendance has waned somewhat, to put it mildly, since you first awaited the chance to testify. I am going to commit to you right now that the next time you and Mike come here, you are going to be following the administration's testimony. OK?

Ms. FOSTER. We won't be last on the list any more? Thank you.
Mr. D'AMOURS. Well, we sometimes tend to overcompensate for our personal—

Ms. FOSTER. Well, at least we know the people who are still here are the ones who really care, I suppose.

Mr. D'AMOURS. Mike?

**STATEMENT OF MICHAEL WEBER, MARINE HABITAT DIRECTOR,
CENTER FOR ENVIRONMENTAL EDUCATION**

Mr. WEBER. Thank you. Mr. D'Amours and member of the subcommittee, I wish to thank you for providing the Center for Environmental Education with the opportunity to testify today regarding the national marine sanctuaries program.

I wish to note that I am testifying on behalf of the Coast Alliance, Friends of the Earth, National Audubon Society, Natural Resources Defense Council, and the Sierra Club. I hope that our testimony will aid Congress in its consideration of the future of the marine sanctuaries program.

One of the benefits of being last to speak is that I have had plenty of opportunity to abbreviate my statement.

I wish to stress at the beginning that the benefits of sanctuary research and education have been seriously undervalued in recent years. I have appended to my written testimony a brief summary of such research. As the sanctuaries program progresses, these benefits become increasingly important. Indeed, research and education are, we believe, among the most crucial areas of growth for the sanctuaries program at this time, and for this reason we support an increase in authorization levels for the program to \$3.5 million for fiscal year 1984, \$4 million in fiscal year 1985, and \$4.5 million in fiscal year 1986.

Without adequate funding for research and education, the sanctuaries program will become nothing more than regulations and management. This would be a tremendous loss.

As we have heard, concerns continue to be expressed about the program. There are two principal concerns: No. 1, the types and levels of human activities which are to be allowed in sanctuary areas; and second, the full involvement of fishermen, industry, Federal, State, and local agencies, and the general public in the review of sanctuary proposals.

I will not go into a great amount of detail regarding this except to note that we ourselves believe that the sanctuary designation process must insure full public participation. As a result, we support reasonable measures which might be taken to see that fishermen are more directly involved in future stages of the review process. We support, for instance, the suggestion that the Commerce Department be required to consult with the appropriate regional fishery management council during the designation process, and with appropriate State officials.

Continued expression of concerns about the implementation of the national marine sanctuary program is no doubt troubling. However, amending title 3 in order to address such concerns should only be undertaken with the utmost caution.

It is clear from early House and Senate reports on title 3 that the primary mission of the marine sanctuaries program is to be the protection of certain marine areas. Indeed, the House report makes it clear that insulation of important marine areas from intrusive activities of man is to be the primary purpose of sanctuary designation. The House also clearly understood that it was important to resist sacrificing long-term values for short-term gains.

Nonetheless, the vague expression of the sanctuary program's purpose in section 302(a) has encouraged continuing debate. We believe that this is the primary cause for the concerns expressed by user groups and conservationists alike about the progress of the program.

What I wish to suggest is a change in perspective, away from a reactive program to an active program. We will be submitting for the record at a later time, with your permission, draft language amending title 3 which will accomplish this end.

To summarize, the national marine sanctuaries program should have as its goal the identification and protection of nationally significant marine areas for their recreational, ecological, historical, geological, or esthetic value. Sites of national significance would be those which are of exceptional quality or value in illustrating or interpreting the ocean heritage of our Nation.

In reviewing sites, the Secretary of Commerce would be directed to consider those sites which, among other things, will provide the greatest public benefit in terms of resource protection, education, and research. The primary purpose for the designation of any sanctuary would be to assure protection and comprehensive management of the resources which make the area nationally significant. Other purposes would include the coordination of research, the enhancement of public awareness, and the encouragement of optimum compatible public and private uses of sanctuary areas.

It is imperative that we establish a system of sanctuaries for several reasons. I will mention only two: First, it is no less true today than it was in 1972, when Congress first passed title 3, that human activities in the coastal zone are increasing. If we do not act with deliberate speed in providing a buffer of protection for a small but significant segment of our coastal waters, we will always be in a position of reacting to the same degradation which has marked the disappearance of many of our Nation's estuaries.

Second, our ignorance of the physical and biological processes which make our coastal waters as productive as they are is still staggering. At a time of increasing development, we must develop the knowledge necessary to manage human activities in such a manner as will promote the long-term productivity of our coastal waters.

I wish to turn to another suggested approach for placing the marine sanctuaries on a firmer basis. As noted earlier this morning, Mr. Breau will be introducing a bill which would require that sanctuaries be designated only by an act of Congress. While we can appreciate the concern reflected in this approach, we do not believe it will efficiently achieve its end. However, we believe that the bill provides a useful basis for discussion.

We have several reasons for opposing this particular approach at this time, and I will mention only two: First of all, congressional

designation would create another layer of review for sanctuary proposals. This review would come at a time when interested parties, Federal, State, and local agencies, would have already expended considerable resources over several years in identifying and resolving conflicts. If the approval of national parks is any indication, congressional review at this stage would add another 2 or 3 years to a designation process which already takes as long as 4 years. I have appended a description of the full administrative process and a review of the designation of the four most recently designated sanctuaries.

Second, given that clear guidelines are provided for the program, such as we have suggested, congressional designation would be duplicative. By removing the current ambiguity regarding the goals and purposes of the program, there would be no room for confusion over congressional intent. If the program has misinterpreted these guidelines in a given case, Congress may exercise the legislative veto provisions of title 3.

Third, congressional designation would not provide the benefits which some user groups think it might. Simply put, there are no assurances that Congress would decide upon user conflicts any differently than the executive branch.

We wish to suggest an alternative to insuring that the sanctuaries program carries out congressional intent. Besides writing guidelines into title 3, Congress could direct the Commerce Department to provide the authorizing committees with a report documenting the next several sites which Commerce will have under active consideration. Such a report would be forwarded to the authorizing committees before reauthorization hearings, so that Congress could review the proposed sites during the reauthorization process. Interested parties could make their views known to the authorizing committees, and Congress could provide its views on individual sanctuaries at an early stage in the process where those views would be most productively incorporated into the designation process.

This would insure that Commerce does not spend a great amount of its resources in working up designation packages which do not reflect congressional intent. It would also create a record to which Congress can refer in considering whether to exercise the legislative veto after designation of a particular sanctuary. Currently, if Congress wishes to exercise the legislative veto, it must start from scratch and review an extensive administrative record without any guidance.

This approach also would provide Congress with a means of judging when increases in funding may be necessary in order to insure that the program maintains active management, research, and education programs at all sanctuaries.

We recognize that these hearings represent only the beginning of Congress's deliberations regarding the future of the national marine sanctuaries program. We emphasize that we are eager to assist the subcommittees in providing a sounder basis for the program. We look forward to working with the subcommittees in the coming weeks to achieve this end.

Once again, I wish to thank you for providing us with this opportunity to testify in support of the sanctuaries program, and I would be happy to answer any questions you may have.

[Material follows:]

PREPARED STATEMENT OF MICHAEL WEBER, MARINE HABITAT DIRECTOR, CENTER FOR ENVIRONMENTAL EDUCATION

Chairman D'Amours, Chairman Breaux, members of the subcommittees, I wish to thank you for providing the Center for Environmental Education with the opportunity to testify today on behalf of the National Marine Sanctuaries Program. I hope that our testimony today will aid Congress in its consideration of the future of the marine sanctuaries program.

When I testified before you regarding the marine sanctuaries program two years ago, I mentioned several points which I wish to reiterate today. The first of these is that the marine sanctuaries program is a unique tool for the protection of a small, but significant part of our nation's ocean and coastal heritage. While other areas are exposed to the risks inherent in development, however well regulated, this program provides certain areas with a buffer against those risks. Thus, we can insure that there is a mix between areas primarily devoted to development and areas primarily devoted to preservation of the biological resources present.

Secondly, research conducted in marine sanctuaries not only aids in protecting the resources of the sanctuaries themselves, but broadens our understanding of marine ecosystems. This benefit will result in sounder decisionmaking in other areas. I have appended a brief summary of such research to my written testimony.

Thirdly, The sanctuaries provide foci for the education of the general public regarding the three-quarters of the Earth which is generally beyond the reach of their direct experience. Not only does such education foster familiarity which can increase their enjoyment of our nation's coasts but it also can make them aware of the critical role which healthy ocean and coastal ecosystems play in human lives.

These last two benefits have been seriously undervalued in recent years. As the sanctuaries program progresses, these benefits become increasingly important. Indeed, research and education are, we believe, among the most crucial areas of growth for the sanctuaries program at this time and for this reason, the Center for Environmental Education urges increasing the authorization levels for the program to \$3.5 million in fiscal year 1984, \$4.0 million in fiscal year 1985 and \$4.5 million in fiscal year 1986. Without adequate funding for research and education the sanctuaries program will become nothing more than regulations and management. This would be a tremendous loss.

As you are no doubt aware concerns continue to be expressed about the program. There are two principal concerns: (1) the types and levels of human activities which are to be allowed in sanctuary areas, and (2) the full involvement of fishermen, industry, federal, state and local agencies, and the general public in the review of sanctuary proposals.

Regarding the multiple-use of sanctuary areas, the oil and gas industry, for instance, has consistently maintained that the program has impeded its ability to explore and develop petroleum reserves on the outer continental shelf. Yet what I said to these subcommittees two years ago still holds true. Oil drilling prohibitions resulting from national marine sanctuary designation affect less than one-tenth of one percent of the outer continental shelf. The industry has been very successful in having its concerns addressed in this program. They successfully halted consideration of sanctuary nominations for the Georges Bank, Flower Garden Banks and the Beaufort Sea. In concert with the Department of the Interior, they also succeeded in suspending the oil drilling prohibitions at the two California sanctuaries in a legally questionable manner (CRS) and subjected these prohibitions to a lengthy and expensive regulatory impact analysis. Therefore, we submit that there is very little, if any, actual effect upon the offshore oil and gas industry from the marine sanctuaries program.

The fishing community has also expressed concerns that the designation of a marine sanctuary will preclude them from important fishing areas. Currently only the Looe Key sanctuary regulates commercial fishing to any extent; there the use of fish traps is not allowed within sanctuary boundaries. To our knowledge, this prohibition, which will eliminate the very damaging effect of 'ghost traps' upon fish within the sanctuary, has not proved to be burdensome. Fishermen's groups in Alaska and Maine have been concerned that they were not sufficiently consulted during the recent Site Selection Process. We wish to point out that this process is

only the initial step in a very long process of review of sanctuary proposals. Similar concerns were expressed by California fishermen when the proposals for the two California sanctuaries first surfaced. As they have gained greater experience with the program, these fishermen have become supporters of the program and have recognized it as a means of providing protection of habitat critical to commercial fisheries.

However, since we ourselves believe that the sanctuary designation process must insure full public participation, we do support reasonable measures which might be taken to see that fishermen are more directly involved in future stages of the review process. We suggest, for instance, that the Commerce Department be required to consult with the appropriate Regional Fishery Management Council during the designation process.

Furthermore, we urge the Commerce Department to review the process with a view to improving public participation. We believe most federal programs suffer from public participation procedures which are outdated and marginally effective. Improvements in the means by which the sanctuaries program keeps the public informed of its plans may well benefit these other programs.

Lastly, the conservation community has been concerned that the program's progress has been jeopardized by continuing attacks. With all due respect to Mr. Young, we are very troubled by the premature termination of the Site Selection Process in Alaska. While we agree that the Site Selection Process in this largest of the eight regions should have been conducted with greater care. We do not believe that the review of Alaska sites should be delayed until all other sites have been designated or eliminated, as the Department of Commerce has indicated.

The sanctuary designation process and the record of the program itself amply demonstrate that opportunities for participation in the designation process by interested parties are extensive. Each proposal, including those developed under the Site Selection Process, undergoes no less than four stages of review by industry, federal, state and local agencies and the general public. There is obviously no assurance that any interest group will obtain all that it wants from a sanctuary designation. Nor is there any means by which any user group might be given such an assurance. Placing the interests of any group above the primary goal of sanctuary designation—the preservation or restoration of marine areas—would be in violation of Congressional intent.

As noted earlier, this process has led to the elimination of several sites which had been under active consideration for marine sanctuary designation. This indicates to me that the process is working. Furthermore, no sanctuary has been designated without the active support of state and local governments, including those agencies with responsibility for fish and wildlife within territorial waters. There are few federal programs which have been as responsive to state concerns.

The program has recognized that there is a need to eliminate the confusion which arose regarding the status of sites on the list of recommended areas (LRA). The resulting Site Selection Process is a significant improvement over previous means of developing a list of candidate sites. There is no doubt that everyone who is interested in the sanctuaries program has a much clearer idea of the reasons for which the program might consider any particular site in the future. Under the LRA process, very few people outside of the program knew anything at all about any site on the LRA much less which sites were on the list. The new process certainly has alerted interested parties to what the sanctuaries program is considering in the way of future sites. The sanctuaries program office will be soliciting further public comment upon their recommendations for sites to include on the final Site Evaluation List. We emphasize that even when a site is finally listed on the Site Evaluation List, it will still undergo three stages of public review before a decision is made whether or not to designate the site as a sanctuary or not.

Continued expression of concerns about the implementation of the National Marine Sanctuary Program is no doubt troubling. However, amending Title III in order to address such concerns should only be undertaken with the utmost caution.

The recent Congressional Research Service study of the program provides a good starting point for this. As the Congressional Research Service noted in its conclusions:

The National Marine Sanctuary Program has undergone a complex evolution of both Congressional intent (evidenced in the original Act and subsequent reauthorization and amendment) and Administrative conduct (evidenced in the variety of statements of goals, purposes, mission, and philosophy of this program). p. 34.

The marine sanctuaries program was established in response to several dramatic incidents of marine pollution resulting from industrial activity. Thus, Congress emphasized the preservation or *restoration* of marine areas in passing Title III. Togeth-

er with the early coupling of sanctuaries with moratoria on mineral exploration on the outer continental shelf, this emphasis has forced the program to appear largely reactive. As a result, the program has been in the midst of controversy after controversy.

Well before the establishment of the sanctuaries program under Title III of the Marine Protection, Research and Sanctuaries Act of 1972, Congress struggled with setting guidelines for human uses of sanctuary resources. While the legislative history of Title III makes clear that multiple uses are to be allowed in sanctuaries, it is equally clear that the primary focus of the program is to be resource protection.

In discussing H.R. 9729, which served as the basis for Title III, the House Report stated that:

Title III deals with an issue which has been of great concern to the Committee for many years: the need to create a mechanism for protecting certain important areas of the coastal zone from intrusive activities by man. This need may stem from the desire to protect scenic resources, natural resources or living organisms: but is not met by any legislation now in the books. . . . The pressures for development of marine resources are already great and increasing. It is never easy to resist these pressures and yet all recognize that there are times when we may risk sacrificing long-term values for short-term gains. The marine sanctuaries authorized by this bill would provide a means whereby important areas may be set aside for protection and may thus be insulated from the various types of "development" which can destroy them. (H.R. Rep. No. 351, 92d Cong., 1st Sess. (1971).)

The Senate Commerce Committee Supported this intent in its report on Title III:

The [Senate Commerce] Committee believes that the establishment of marine sanctuaries is appropriate where it is desirable to set aside areas of the seabed and superjacent waters for scientific study, to preserve unique, rare, or characteristic features of the oceans, coastal and other waters, and their total ecosystems. In this we agree with the members of the House of Representatives. Particularly with respect to scientific investigation, marine sanctuaries would permit baseline ecological studies that would yield greater knowledge of these preserved areas both in their natural state and in their altered state as natural and manmade phenomena effect change. (Senate Rep. No. 451, 92d Cong., 1st Sess. (1971).)

It is clear from these statements that the primary mission of the marine sanctuaries program is to be the protection of certain marine areas. Indeed, the House Report makes it clear that insulation of important marine areas from intrusive activities of man is to be the primary purpose of sanctuary designation. The House also clearly understood that it was important to resist sacrificing long-term values for short-term gain.

Nonetheless, the vague expression of the sanctuary program's purpose in Section 302(a) has encouraged continuing debate. We believe that this is the primary cause for the concerns expressed by user-groups and conservationists about the progress of the program. Amplifying Congressional intent regarding the goals, purposes and criteria of the program will provide the basis for a steadier development of the program. This will also lead to a more predictable product at the end of the designation process.

We will be submitting for the record at a later time draft language amending Title III, which will accomplish these ends. To a large extent, we have based this language upon the sanctuary program's Program Development Plan, since this plan is the result of considerable research regarding approaches to the identification, conservation and use of special marine areas. To summarize, the national marine sanctuaries program should have as its goal the identification and protection of nationally significant marine areas for their recreational, ecological, historical, geological, or esthetic values. Sites of national significance would be those which are of exceptional value or quality in illustrating or interpreting the ocean heritage of our Nation. In reviewing sites, the Secretary of Commerce would be directed to consider those sites which, among other things, will provide the greatest public benefit in terms of resource protection, education and research. The primary purpose for the designation of any sanctuary would be to assure protection and comprehensive management of the resources which make the area nationally significant. Other purposes would include the coordination of research, the enhancement of public awareness, and the encouragement of optimum compatible public and private uses of sanctuary areas.

It is imperative that we establish a system of sanctuaries for several reasons. First, the variety of our Nation's coastal waters is as much a part of our heritage as is the variety of our terrestrial areas. We have a duty to future generations to conserve a legacy of this variety. Second, it is no less true today than it was in 1972 when Congress first passed Title III that human activities in the coastal zone are

increasing. If we do not act with deliberate speed in providing a buffer of protection for a small but significant segment of our coastal waters, we will always be in a position of reacting to the same degradation which has marked the disappearance of many of our Nation's estuaries. Third, our ignorance of the physical and biological processes which make our coastal waters as productive as they are is still staggering. In a time of increasing development, we must develop the knowledge necessary to manage human activities in such a manner as will promote the long-term productivity of our coastal waters. Finally, as the Nation's citizens move increasingly to coastal areas, it is of considerable importance that they be made aware of the richness of the Nation's coastal heritage.

We wish to turn to another suggested approach for placing the marine sanctuaries program on a firmer basis. We understand that Mr. Breaux has introduced a bill which would require that sanctuaries be designated only by an Act of Congress. While we can appreciate the concern reflected in this approach, we do not believe it will efficiently achieve its ends.

First of all, Congressional designation would create another layer of review for sanctuary proposals. This review would come at a time when interested parties, federal, state and local agencies would have already expended considerable resources over several years in identifying and resolving conflicts. If the approval of national parks is any indication, congressional review at this stage would add another two to three years to a designation process which already takes as long as four years. I have appended a description of the full administrative process and a review of the designation of the four most recent sanctuaries.

Secondly, given that clear guidelines are provided for the program, such as we have suggested, Congressional designation would be duplicative. By removing the current ambiguity regarding the goals and purposes of the program, there would be no room for confusion over Congressional intent. If the program has misinterpreted these guidelines in a given case, Congress may exercise the legislative veto provisions of Title III.

Thirdly, Congressional designation would not provide the benefits which some user groups think it might. Simply put, there are no assurances that Congress would decide upon user-conflicts any differently than the executive branch. Furthermore, because designation of a sanctuary would be a legislative act, user groups which might dispute the final designation would not be able to seek relief in the federal courts.

Finally, Congressional designation would not insure a sounder basis for funding the program. Authorization and appropriation for individual sanctuaries would increase the opportunity both to decrease or eliminate funding and to maintain or increase funding. We do not see that this differs much from the current situation, except that it would prevent the program from maximizing the effectiveness of reduced funding by allocating monies among sanctuaries.

We wish to suggest an alternative to insuring that the sanctuaries program carries out congressional intent. Besides writing guidelines into Title III, Congress could direct the Commerce Department to provide the authorizing committees with a report documenting the next ten sites which Commerce will have under active consideration. Such a report would be forwarded to the authorizing committees before reauthorization hearings so that Congress could review the proposed sites during the reauthorization process. Interested parties could make their views known to the authorizing Committees, and Congress could provide its views on individual sanctuaries at an early stage in the process where those views would be most productively incorporated into the designation process. This would insure that Commerce does not spend a great amount of its resources in working up designation packages which do not reflect congressional intent. It also would create a record to which Congress can refer in considering whether to exercise the legislative veto after designation of a particular sanctuary. Currently, if Congress wishes to exercise the legislative veto, it must start from scratch and review an extensive administrative record without any guidance. This approach also would provide Congress with a means of judging when increases in funding may be necessary in order to insure that the program maintains active management, research and education programs at all sanctuaries. Finally, our suggested approach would see to it that the program does not falter because a particular administration does not see fit to suggest areas for sanctuary designation.

We recognize that these hearings represent only the beginning of Congress's deliberations regarding the future of the National Marine Sanctuaries Program. We emphasize that we are eager to assist the subcommittees in providing a sounder basis for the program. We look forward to working with the subcommittees in the coming weeks to achieve this end.

Once again, I thank you for providing us the opportunity to testify in support of the National Marine Sanctuaries Program. I would be happy to answer any questions you may have.

CURRENT RESEARCH IN NATIONAL MARINE SANCTUARIES

An important part of every sanctuary management plan is the resource studies plan. This plan is developed to encourage research within a given sanctuary. The studies plan identifies two research goals:

(1) To provide opportunities for improved understanding of the marine environment, and

(2) To improve management techniques by providing information on management effectiveness, the effects of human activities, and other use-oriented topics.

Through continual research, monitoring and environmental assessment, we will gain new insight into the management of marine areas.

CHANNEL ISLANDS NATIONAL MARINE SANCTUARIES

(1) Pinniped Population Dynamics Monitoring: This study will establish an automated data management system for monitoring pinniped population dynamics. The system will provide a long-term base on natural population fluctuations that may be distinguished from disturbances due to human activities. The initial data is being collected by periodic aerial surveys and ground/boat verifications of the aerial photographs.

(2) Natural Resource Monitoring Data Management System: An automated data management system is being developed at the sanctuary for easy storage, retrieval and production of hard-copy reports describing the abundance, distribution, reproduction, population dynamics and other aspects of the diverse number of plants and animals in the sanctuary. Data bases have been established and the computer hardware is now in place.

(3) Visitor Survey: Analysis of the first year's data shows that the aerial survey method is economically feasible only in areas of high visitor use. The survey monitors boating activity in the sanctuary to determine its level of disturbance of marine life. Information on the number, distribution and types of boats in the sanctuary will be available. This will aid managers in apportioning personnel for visitor services and enforcement of regulations.

(4) Monitor Selected Seabird Populations: Information from this study will help sanctuary managers evaluate changes in seabird populations in relation to human activities. Population distribution studies will help determine the tolerance levels of seabirds to increased disturbances by human activities. The information will assist the sanctuary managers with decision-making regarding the need for site-specific distances between visitors and seabirds and other problems relating to human/seabird interactions. Field monitoring has begun, using aerial photogrammetry ground surveys.

(5) Pinniped Interactions: There are three objectives to this study: (1) to document the natural movement pattern and hauling behavior of individual harbor seals and to determine how much variability exists between age and sex classes, (2) to determine how human disturbances affect behavior and movement patterns, and (3) to determine correction factors for beach counts of hauled out harbor seals that will allow estimates of the entire population to be made. The first year of monitoring shows that the study is economically feasible only in areas where many pinnipeds return to haul out. These specific areas will continue to be monitored for pinniped activity.

(6) Food Habits of Pinnipeds Within the Channel Islands Sanctuary: This research, coordinated with the previous study, will determine the critical pinniped feeding areas in the sanctuary, and the duration of the average feeding cycle in these feeding areas. The study will also involve radio-tracking to obtain dive profiles. Animals will be monitored from aircraft or surface vessels.

Two species are initially being studied, the California sea lion and harbor seal, because their populations are thought to be increasing. Due to this increase, changes in distribution and abundance of prey species are likely to occur. The study will show how population levels and other components of the ecosystem are responding to change.

POINT REYES/FARALLON ISLANDS NATIONAL MARINE SANCTUARY

(1) Assessment of Aquatic Bird Abundance and Trophic Relationships within the Estuaries and Lagoons of the Point Reyes/Farallon Islands Sanctuary: Shorebirds are an important indicator of estuarine health because they feed on invertebrates that live in the tidal flats. Much information has been gathered over the past 15 years, yet it was never analyzed for Sanctuary use. This study will make assessments, based on old and new data, of the abundance, habitats, and trophic relationships of these aquatic birds, that is needed for management and protection purposes.

(2) Ecological Organization of a Subarctic Breeding Seabird Community in the Point Reyes/Farallon Islands Sanctuary: Previously there has been no study to interrelate the breeding behavior and feeding ecology of seabirds. This study will analyze information on reproduction, biology and annual fluctuations, on dispersal and survival, foraging behavior and diet, to determine the link between breeding biology and feeding ecology. The information is vital to sound management of the Sanctuary.

(3) Pinnipeds Along the Point Reyes Coast: Four species of pinnipeds are being studied—harbor seal, northern sea lion, California sea lion and northern elephant seal. Information is being gathered on distribution and reproductive success at various locations and seasonal use relative to tidal and seasonal weather conditions. Other areas of interest include feeding habitats and effect of human disturbances. Pinnipeds are counted on a semi-monthly basis, with periodic all-day censuses with hourly counts. This study will provide more accurate methods for censusing harbor seals and sea lions, and will aid Sanctuary managers in making management decisions for all four species regarding visitor impact and interpretive programs.

(4) Assessment of Pinniped/Human Interactions: Due to its proximity to a large urban area, the Point Reyes/Farallon Islands Sanctuary offers a unique opportunity to study pinniped/human interaction along the coast. This study will assess visitor interest in observing pinnipeds as well as visitor impact on pinnipeds as well as visitor impact on pinniped hauling out patterns. Human/pinniped interactions will be recorded during peak visitor use (weekend/holidays) once a month for a year. The results of this study will provide information on sources and location for interactions, and the extent to which pinnipeds can recover from human interaction. The study will also provide baseline information on which types of visitor activities have an impact on pinnipeds. Sanctuary managers may design interpretive programs and/or limit interactions to protect pinnipeds from unnecessary human disturbance.

(5) Intertidal and Subtidal Resource Census: This study will provide baseline data for an ongoing monitoring program of intertidal and subtidal areas. Areas especially vulnerable to environmental disturbance as a result of present visitor use patterns and commercial activities are being identified. Using this information a monitoring plan will be developed for use in sanctuary management.

GRAY'S REEF NATIONAL MARINE SANCTUARY

(1) Assessment of Roller-Rig Trawl Impacts on Benthic Habitats: The effects of roller-rigged trawls on live bottom communities is presently unknown. In recent years, interest in using fish trawls has increased, causing concern from commercial and recreational fishing groups, as well as management agencies. Roller-rigged trawls are also used for research purposes. This study will (1) determine the number and species of large benthic invertebrates damaged or removed from inshore live bottom habitat by fish trawling with a standard research trawl, and (2) determine the rate at which large sessile invertebrate populations grow, recover and recolonize after a research trawl operation. Information will be gathered using visual observation and trawl samples taken from outside the Sanctuary.

(2) Reconnaissance Hydrographic Survey of the Gray's Reef Sanctuary: This study has determined the occurrence and distribution of hard bottom outcroppings within and adjacent to Gray's Reef. These outcroppings support special live communities and are the target of most user group activities. Using depth recording devices, sonar and other technical methods, regional bathymetric, topographic and shallow subbottom information has been gathered.

(3) Determining Faunal Communities Associated with Selected Sponges and Octocorals: Little information exists on the infaunal and epifaunal invertebrate communities supported by South Atlantic sponges and octocorals. This study will investigate the type, extent and value of the contributions of sponges and octocorals to the maintenance of South Atlantic live bottom ecosystems.

(4) Field Guide to the Fishes of Gray's Reef: Gray's Reef represents a unique inter-ception of northern and southern fish species. Previous guidebooks for divers have concentrated on the tropical fish, to the exclusion of northern varieties. This study

will combine all species found on the reef to create a divers guidebook to the area. Data is being collected by photography and minimal sampling from outside the sanctuary boundaries. Divers will be given a questionnaire to determine a preferred format for the guidebook. A draft of the book will be submitted to other fisheries scientists for comment and suggestion before a final guide is printed.

KEY LARGO NATIONAL MARINE SANCTUARY

(1) Key Largo Coral Reef Marine Sanctuary Current Study: Information from this study will be used to determine the circulation patterns in the Sanctuary and adjacent areas in John Pennkamp State Park and Biscayne National Park. Based on the first year's results, the number of current meters has been expanded and the study area has been increased into the areas south and north of Key Largo. This will give a better overview of circulation patterns off the Florida coast. Data from the study will be used in conjunction with water quality data to generate a water quality model.

(2) Biological Inventory and Reef Health Assessment: To improve our understanding of the marine environment, a biological inventory is being performed on the Key Largo Coral Reef. The study will provide an analysis of reef structure, a description of organisms in major sanctuary provinces and a resource map of the area. An analysis of reef health will also be made. Reef degradation and damage to corals by anchors will also be noted.

(3) Water Quality Monitoring: Although coral reefs are extremely sensitive to changes in water quality, little water quality data is available for the Key Largo reef area. Effective management of the Sanctuary depends in part on the ability to monitor factors that affect water quality and influence reef health. This study will analyze monthly water samples from at least 12 stations around the Sanctuary and adjacent areas. The data will be used along with current data to generate a water quality model.

(4) Key Largo Water Quality Assessment and Modeling Program: This study will indicate whether water quality changes are occurring, what they are, why they are occurring and the source responsible for the change. A mathematical model will be developed which is capable of simulating the behavior of the environment under stress. Information from the current study, water quality monitoring and the modeling program will provide Sanctuary managers with a method to detect early warning signs in a possibly deteriorating environment so that timely management decisions can be made.

(5) Epizootiology of Malignant Tumors of the Bicolor Damselfish within the Looe Key and Key Largo Coral Reef: This study investigated the origins and transmission patterns of disease in reef fish populations, and attempted to relate environmental variables to fish health. Focusing on the distribution of a malignant disease tumor in the bicolor damselfish, the study determined a relationship between the disease and environmental factors, such as reef location and structure, water quality and other marine life. Based on first year data, there is a trend in disease intensity: greater in Key Largo area than at Looe Key.

(6) Mooring Buoy Study: A significant problem at Key Largo involves anchoring of boats in the sanctuary. Although anchoring on the coral is prohibited, many boaters are inexperienced and unintentional damage to coral results. The initial study served to design a buoy system that would be non-detrimental to the reef. Commonly, buoy systems use a chain to attach the buoy to a weight. The chain chafes the boom and injures the reef. At Key Largo, managers have developed a system using stainless steel pins, with an eyebolt cored into the bedrock. The eyebolt is cemented into place and a polypropylene line is run up to the buoy. Boaters simply tie into a line on the buoy. There are presently 40 buoys installed throughout the Key Largo Sanctuary and the system has proved to be a big success. The second part of the study involves an evaluation of the system's utility and maintenance.

LOOE KEY NATIONAL MARINE SANCTUARY

(1) Effects of Predator Removal on Reef Fish Community Structure: This research will examine the effects of reduced human exploitation on the coral reef fish community structure. Specifically, the investigation has shown that predator fish populations are significantly smaller on reefs impacted by spearfishing than on non-harvested reefs. This study will quantitatively test a predator model to document changes that occur in the Looe Key as the result of sanctuary protection. Research results show major faunal differences among non-target species. This indicates that spearfishing has a considerable indirect effect on coral reef communities. In addi-

tion, results show that spearfishing affects coral reef fish behavior; the fish will leave a spearfishing area or become less approachable.

(2) A study of Three Selected Groups of Invertebrates at Looe Key Reef: This study will focus on certain of the smaller invertebrates inhabiting the coral reef. These organisms represent an ecologically important aspect of the reef community. The study will detail three very different patterns of life on the coral reef that may be used as models for management purposes and additional investigations.

PUBLIC PARTICIPATION IN THE MARINE SANCTUARY DESIGNATION PROCESS

Under the current designation process, the public, user groups, local and state governments and federal agencies have no less than four opportunities to participate in the decisionmaking process. In addition, Congress may veto designations after the completion of the process. Several proposed sanctuaries, including proposals for Georges Bank, Flower Garden Banks, St. Thomas in the Virgin Islands, and the Beaufort Sea, have been dropped from active consideration in the course of this process.

Under the current designation process, any future sanctuaries will have to undergo several levels of review. Under the Site Selection Process, which the Commerce Department is currently conducting, a series of sites will be recommended by teams of scientists in each of eight regions. These sites have been submitted for public comment. The teams will go over the comments and forward to Commerce their final recommendations. Each team may nominate up to five sites per region. Commerce will then select from this list sites which will make up a draft Site Evaluation List. This draft list will be sent out for public comment before being finalized.

If the Commerce Department wishes to actively consider any one of the sites on the Site Evaluation List, it will prepare an issue paper regarding the site. This issue paper will be subject to public comment. Provided that the public review supports moving ahead with the proposal, the Commerce Department will then prepare a draft environmental impact statement, obtain public review, prepare a final environmental impact statement, and obtain reviews from other federal agencies and the public. Then the Commerce Secretary must seek the approval of the President. Once this is done, the governor of an affected state may veto those provisions of a sanctuary designation which apply to state waters and Congress may veto all or parts of the designation.

As the table below shows, sanctuary designation is already a time consuming process.

CHANNEL ISLANDS

Recommended by Resources Agency of the State of California, 1977.
Public workshop on proposal, April 1978.
Formally nominated by the County of Santa Barbara, June 1978.
Issuance of Issue Paper, December 1978.
California Coastal Commission hearings, March 1979.
Circulation of designation options, June 1979.
Issuance of DEIS, November 1979.
Public hearings on DEIS, January 1980.
Issuance of FEIS, June 1980.
Designation of sanctuary, September 1980.

LOOE KEY

Nominated by Florida Key Citizens Coalition, November 1977.
Workshop on issue paper, January 1978.
Scoping meeting on draft EIS, October 1979.
Issuance of DEIS, May 1980.
Public hearings on DEIS, June 1980.
Issuance of FEIS, November 1980.
Designation of sanctuary, January 1981.

GRAY'S REEF

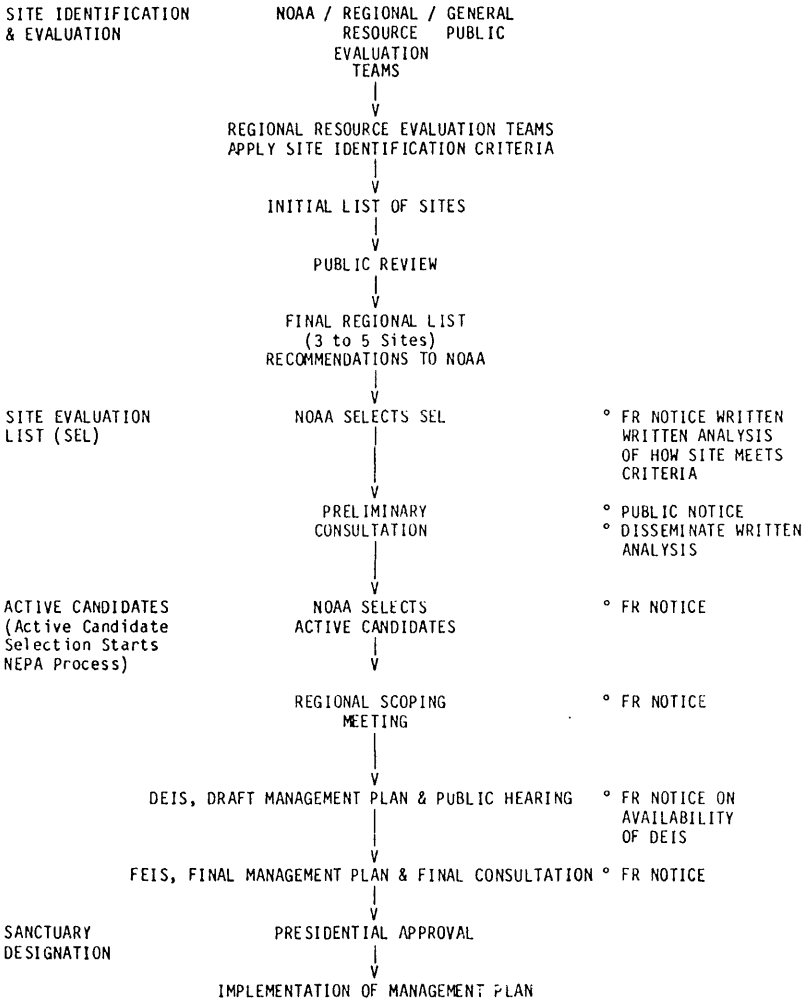
Nominated by Coastal Resources Division of the Georgia Department of Natural Resources, June 1978.
Circulation of nomination, July 1979.
Workshop on issue paper, November 1979.
Scoping meeting on DEIS, January 1980.
Issuance of DEIS, May 1980.

Public hearings on DEIS, July 1980.
Issuance of FEIS, November 1980.
Designation of Sanctuary, January 1981.

POINT REYES/FARALLON ISLANDS

Recommended by Resources Agency of the State of California, 1977.
Public workshop on proposal, April 1978.
Issuance of Issue Paper, December 1978.
California Coastal Commission hearings, March 1979.
Circulation of designation options, October 1979.
Public meeting on designation options, November 1979.
Issuance of DEIS, March 1980.
Public hearings on DEIS, May 1980.
Issuance of FEIS, October 1980.
Designation of sanctuary, January 1981.

FIGURE 1
NOMINATION/DESIGNATION PROCESS



Mr. D'AMOURS. Thank you, Mr. Weber.

In your testimony, you both have recommended authorization levels that are somewhat higher than those submitted by NOAA—\$3 million in the first year, you suggested, Sherrard, and Mike, you had \$3.5 million. Then you go on to \$3.5 and \$4 million in the second and third years, and \$4 and \$4.5 million; Mike, you track her at \$500,000 higher right along.

You heard the testimony of Mr. Tweedt earlier. He suggested that they could continue adding designated sites at a cost much less than the average cost of \$200,000 per site now, in terms of site management. Do you have any basis upon which to corroborate your figures or to dispute Mr. Tweedt's, either of you? I am addressing the question to either or both of you.

Mr. WEBER. At this time one of the reasons I am suggesting higher figures is that it is not possible, I believe, to track perfectly what the program will need in future years, and I think it is important to provide some sort of buffer in authorization levels so that, should there be an increase needed for any one of a variety of reasons, that increase can be taken care of. I fully expect that the Appropriations Committee themselves, for instance, will go into greater detail on the funding for the program.

As far as the specific figures at this point, I believe that there are already signs that the program may have to sacrifice research and educational programs, and as I noted in my testimony, I think it is absolutely crucial that those two areas grow. I think those are two of the major benefits of the program. There has been far too much attention paid to regulations.

Mr. D'AMOURS. Education and research are the two areas you would—

Mr. WEBER. I would like to see growth in that area.

Mr. D'AMOURS. There seems to be some general agreement that the \$2.26 figure in the first year, given the fact that we have not yet designated the three sites that are pending designation, is sufficient. Your figure is somewhat higher than that. Don't you believe that we could get by, at least in the first year, with the \$2.26 million figure?

Ms. FOSTER. I may be wrong, but I think the figure was actually \$2.235 and not \$2.6 million. Am I wrong?

Mr. D'AMOURS. I have \$2.26 million.

Ms. FOSTER. Maybe I am wrong.

Mr. D'AMOURS. That was in the budget submission.

Ms. FOSTER. As Dr. Foster had noted earlier, there are three outstanding, ready to come on-line, sanctuary proposals. If her averages are roughly accurate regarding the cost of maintaining a sanctuary annually, that is an extra \$600,000 per year. I will admit that my figures are a little bit arbitrary, somewhat in keeping with the statement that Michael made earlier about the need to expand the public interpretive programs and educational programs. I believe he is correct that the program is currently facing a reduction in these areas, particularly at a time when I think it ought to be increased. I will admit that I do not have anything factual to base that figure upon. It is somewhat arbitrary.

Mr. D'AMOURS. That last statement really says it all, so I will not pursue that any further now.

By the way, the record will be kept open, without objection—and there being nobody here but me to object, I guess we can assume that there will be none—for the submission of the information you referred to, Mike, but could you give me some idea of when you are going to have that for the committee?

Mr. WEBER. Well, we hope to have a final draft within a week. We are still working out some of the details, and I have to emphasize that it would be a working draft. We recognize that there is an important process going on of trying to determine exactly what approach is the best approach, and I believe that there—

Mr. D'AMOURS. You can have it in a week?

Mr. WEBER. Yes, I certainly intend to.

Mr. D'AMOURS. We would appreciate that.

Everybody seems to agree that one of the problems that nags this Title III marine sanctuaries program is the lack of a clearly enunciated congressional intent or purpose. You have indicated that you will be submitting recommendations along these lines. Could you give me some idea now as to the flavor of this language and what your direction is?

Mr. WEBER. Well, I touched upon some of the major features in my testimony. The thrust behind it is that the program needs more guidance at this point, and rather than being a reactive, threat-oriented program, we believe there should be an affirmative attempt to create a representative system of the ecosystems that make up the coastal waters of the United States.

Much of my thinking on this particular matter comes from reviewing the estuarine sanctuaries program and what guidelines are used there. Congressional intent is much more explicit for that particular program, and basically the idea is that an area should be nationally significant in terms of its either being unique or its unique quality in illustrating part of our coastal heritage, and there are a variety of criteria. Many of those criteria we will be borrowing liberally from the program development plan.

The program development plan is an important document because it represents, I believe, the state of the art in terms of how one identifies areas in a systematic manner that will benefit from comprehensive protection, research, and education. Therefore, we plan to use the program development plan as a basis, and I hope that that gives you some idea of the direction that I am heading right now.

Mr. D'AMOURS. All right.

Ms. FOSTER. Mr. D'Amours?

Mr. D'AMOURS. Sure.

Ms. FOSTER. One thing I would like to point out, also, in connection with the concept of creating a system of marine sanctuaries, in addition to all the benefits that Michael has spoken of, I think that such clearly enunciated language in the statute would perhaps help to allay some of the fears of user groups or industry groups concerning how big the program is going to get. There have certainly been arguments in the past from industry and others that this program is totally open-ended and has the potential of "running away," and encumbering all sorts of uses on the OCS. I think if the statute itself were more explicit about the positive mandate to create a system of sanctuaries over X number of years, or some

period of time, it would do a lot to give people a much clearer impression of what the program is all about and where it is going to end.

Mr. D'AMOURS. I think that is a very good point.

I would like your opinion on the suggestion of Mr. Apollonio from Maine, that the State veto extend to the entire site for the practical purpose of somehow assuaging State concerns. What are your feelings about that?

Mr. WEBER. Well, at this time, having just heard it, I can just give you a preliminary reaction. I do not believe that that is the best approach to allaying State concerns. I should note that all of those sanctuaries that have been designated so far have enjoyed considerable State support. Indeed, I rather think that where you do not have State support, you will not have a marine sanctuary, and NOAA will have decided that well before the designation.

I would think that there are also some legal problems regarding that suggestion: For instance State jurisdiction extending beyond territorial waters. I am not sure what other legal questions there may be but it would seem to me that there might be some problems there.

Mr. D'AMOURS. Is it your experience, though, that there is this State concern? Is there really some antipathy in State government or among State user groups that is being reflected by Mr. Apollonio's suggestion?

Mr. WEBER. I certainly believe so. The case of Maine in particular is an indication that the less someone knows about the sanctuaries program, the more alarmed they are likely to be, and I think it is largely a process of education. I do not believe it is something that can necessarily be solved legislatively or should be solved legislatively, and the record of the program is certainly one in which State concerns have been considered very, very carefully. Most of the sites so far that have been designated have been nominated by the States. Nevertheless I can understand the concerns at this point. I am just not sure that they can be solved in this fashion, legislatively.

I do agree with the notion that has been raised several times in this hearing regarding the inclusion of the appropriate regional fishery management council in the consultation process, and also the appropriate agencies in State government.

Mr. D'AMOURS. All right.

In case anybody doubts that we strictly enforce the 5-minute rule, I just got a notice that my 5-minute time limit has expired. I am going to cavalierly disregard that notice, without objection.

One of the things that has been buzzing around here is the need for public education. Apparently that was a problem in Maine, and it clearly was a problem in Alaska, devastatingly so. A lot of people including yourselves have mentioned that the word "sanctuary" is one aspect of the problem. Is that true? Is there another word that one could use that would help to alleviate public fears?

Ms. FOSTER. We have sat around and talked about that for many weeks. I do think that to the person who knows nothing about the program, the term "sanctuary" in itself would connote sort of a no-activity zone, not to be entered by man or his activities.

Mr. D'AMOURS. What would you call it?

Ms. FOSTER. We did not come up with anything.

Mr. WEBER. There are a number of ideas that have been tossed around—marine reserve or——

Ms. FOSTER. Parks, but that has its problems, too.

Mr. D'AMOURS. What was yours?

Ms. FOSTER. Marine parks has its problems also.

Mr. D'AMOURS. Marine park?

Ms. FOSTER. That is not a suggestion.

Mr. D'AMOURS. That will get the lumbering industry excited, yes.

Mr. WEBER. That may also create some confusion as to what program the public is dealing with, if the program's name is changed and we come in and say, "Well, we talked to you a couple of years ago about marine sanctuaries, and now we are talking about marine reserves." I do not know that that is going to create a lot of confidence outside the program.

I think that there is a generic problem with Federal agencies and public participation. I do not believe that this is the only program that has problems. I am quite familiar with offshore oil and gas leasing——

Mr. D'AMOURS. Maybe we should call Ann Gorsuch in to give us the ramifications of a name change when you are in trouble.

Ms. FOSTER. I am not sure it has helped her.

Mr. D'AMOURS. Before this hearing deteriorates further, I will thank you both for your testimony.

Ms. FOSTER. Thank you.

Mr. D'AMOURS. I have two items of testimony to be submitted for the record from the National Fisheries Institute, Inc. and the University of Alaska, and of course that will be accomplished without objection.

[Material follows:]



NATIONAL FISHERIES INSTITUTE, INC.

1101 CONNECTICUT AVENUE, N.W. ■ WASHINGTON, D.C. 20036 ■ (202) 857-1110

February 18, 1983

The Hon. John B. Breaux
Chairman
Subcommittee on Fisheries, Wildlife
Conservation and the Environment
H2-544 House Office Building Annex II
Washington, DC 20515

The Hon. Edwin B. Forsythe
Ranking Minority Member
Subcommittee on Fisheries, Wildlife
Conservation and the Environment
H2-540 House Office Building Annex II
Washington, DC 20515

The Hon. Norman E. D'Amours
Chairman
Oceanography Subcommittee
H2-541 House Office Building Annex II
Washington, DC 20515

The Hon. Joel Pritchard
Ranking Minority Member
Oceanography Subcommittee
H2-538 House Office Building Annex II
Washington, DC 20515

Dear Messrs. Breaux, Forsythe, D'Amours, Pritchard:

As a national trade association representing more than 1,200 companies involved in the harvesting, processing and distribution of fish and seafood products, the National Fisheries Institute (NFI) wishes to comment on the reauthorization of Title III of the Marine Protection, Research and Sanctuaries Act of 1972. During previous reauthorization hearings on this Act, NFI expressed deep concern with the expansion and focus of the Marine Sanctuary Program established under Title III. This continues to be of great concern to us.

Past rationale used to justify marine sanctuary designations has suggested an intent to use the program as a comprehensive ocean use management tool. NFI believes Congress did not provide the Secretary of Commerce with sweeping authority to regulate multiple use of the oceans under Title III. We support a more narrow focus which recognizes other significant marine resources protection legislation and restricts the application of the marine sanctuary statute to particular instances where existing law and regulations do not provide sufficient protection.

Past House Committee Report language expressed the Merchant Marine and Fisheries Committee's intent that the Secretary in exercising authority under Title III "shall avoid duplicative regulatory authority and additional layers of bureaucracy where existing law and regulations provide sufficient protection". This complements NFI's understanding of how the Marine Sanctuary Program should be implemented. However, after reviewing marine sanctuary site proposals for the Gulf of Mexico in 1982, NFI found, in most instances, that the "rationale for consideration of a sanctuary" did not include any finding that the area could not be adequately managed and regulated under existing statutes. For example, the proposed site at the Shoalwater Bay-Chandeleur Sound location was identified as an important spawning and nursery ground for fish, shrimp and

crab, and as a fishery habitat which contributed significantly to commercial fisheries and recreational activities in which management was deemed to be in the public interest. NFI members in Louisiana advised us that existing State and Federal fishery management entities could adequately manage and regulate the fishery habitat in that area.

In reference to fisheries management, we strongly feel that regulations should not be promulgated through the marine sanctuary proposal as long as fishing activities can be regulated through the Regional Fishery Management Councils. Congress established a sound system to address fishery management needs under the Magnuson Fishery Conservation and Management Act (MFCMA). Fishery regulations established under a marine sanctuary, at best, duplicate Council efforts and may even conflict with regulations established pursuant to the MFCMA.

NFI would support amendments to the Marine Protection, Research and Sanctuaries Act that require the Secretary of Commerce to follow specific criteria in making a determination of the need for marine sanctuaries under Section 302(a), and prohibit sanctuary designations if effective implementation of existing Federal and State statutory authorities provide an equal level of protection. A proposed amendment to Section 302 is attached for your consideration.

Sincerely,

NATIONAL FISHERIES INSTITUTE



Richard E. Gutting, Jr.
Vice President - Government Relations

REG/sb

Attachment

cc: Fisheries and Oceanography Subcommittees members

Amendment to the Marine Protection & Sanctuaries Act

Section 302 of the Marine Protection, Research, and Sanctuaries Act of 1972 (16 U.S.C. 1432 is amended--by inserting "(1)" after "(a)", and by inserting at the end thereof the following new paragraphs:

"(2)" In making the determination required in Paragraph 1, the Secretary shall review such areas in accordance with the following criteria:

- (1) The extent to which existing state and federal regulatory authorities provide a basis for the protection of the values for which a sanctuary may be designated;
- (2) An assessment of the extent to which the coordination of existing federal and state regulatory authorities will provide a level of protection equal to that available under this section;
- (3) The severity and imminence of existing or potential threats to the resources found within such areas;
- (4) The type and estimated value of the natural resources and human uses within such area, and the probable impact on such uses and natural resources of regulations which may be issued to control activities permitted within such area, as well as the benefits to be derived from protecting or enhancing the resources within the sanctuary;
- (5) The extent to which a sanctuary designation is necessary to permit research opportunities on a particular type of ecosystem or on marine biological and physical processes;
- (6) The value of such area for one or more life-cycle activities, including breeding, feeding, rearing young, staging, resting or migrating of the following:
 - (i) rare, endangered or threatened species;
 - (ii) species with limited geographic distribution;
 - (iii) species rare in the waters to which the Act applies; and
 - (iv) commercially or recreationally valuable marine species.

"(3)" In evaluating the criteria listed in Paragraph 2, the Secretary shall give due consideration to the relative values of each criterion; except that the Secretary shall not designate any such area as a marine sanctuary if he determines that the coordination of existing federal and state regulatory authority will provide protection for such area equal to that possible pursuant to a sanctuary designation.



UNIVERSITY OF ALASKA
FAIRBANKS, ALASKA 99701

February 18, 1983

The Honorable Norman E. D'Amours,
Chairman
Subcommittee on Oceanography
Committee on Merchant Marine & Fisheries
U.S. House of Representatives
1334 LHOB
Washington, D.C. 20515

Dear Representative D'Amours,

I am submitting the following material for the record for the February 24, 1983 hearings on Title III of the Marine Protection Research and Sanctuaries Act. I was team leader for the Alaskan region during the Marine Sanctuaries Site evaluation process, and since I am unable to attend the hearings in person, wish to contribute a little information.

As you know, the process was forestalled without completion in the case of Alaska. My particular charge in the evaluation was to convene a team of scientists and produce a list of not more than twenty sites which would qualify for sanctuary status on the basis of scientific criteria only. This is exactly what we did. The scientific team included a fisheries scientist who had been a fisherman in the past, an oil company representative, a natural resource scientist, and myself. I am a marine scientist and limnologist. After a long work session, the team came up with nineteen sites which met the scientific criteria. There was no question of most of these sites becoming final tentative candidates. We understood that most would be eliminated and that in the end we would have to cut down the number to less than five, and more likely to three or four at the most. The next stage was to be public comment. On the basis of the public comment, we would cut down the number to a few workable acceptable sites. With respect to the nineteen, tentative qualified sites, the team agreed on all of them without dissent, because the criteria were scientific, only.

With respect to the public information aspect, prior to the team meeting, there were discussions with representatives of Governor Hammond, the Alaska Department of Fish and Game, the Coastal Zone Management Office in Juneau, the Alaska Oil and Gas Association, and the North Pacific Fisheries Management Council. From these, perspective was obtained, and also suggestions for groups and persons who should be included on the mailing list. In particular a detailed list of fishermen's organizations was assembled. The intent was a widespread dissemination of information on the potential sites to ensure maximum input and responsiveness to local concerns.

I believe that much of the problem with the program arose from two misperceptions. First of all, that these nineteen tentative sites constituted proposed sites. They were merely preliminary proposed sites. Secondly, that sanctuaries were designed as federal preserves. As we, the scientific team, understood it, sanctuaries are misnamed. They are intended to focus attention on unique or typical marine ecosystems which deserve public and scientific attention. Of course such areas include waters subject to profitable fisheries activity. But we clearly understood that sanctuaries do not need to restrict fisheries, but in fact may enhance fisheries. We also understood that federal management was not the goal, but a mutually satisfactory management scheme negotiated between the federal, state and local interests. The next step in our procedure would have been a meeting to take into account all the concerns and considerations raised in the public comment period, and to cut down the number of sites to acceptable, workable nominations.

While I was not very familiar with the Marine Sanctuaries Program prior to my involvement with this selection, I wish to emphasize that I believe a good faith effort was made with respect to the Alaskan program. As far as my involvement and that of my fellow scientists, I feel that it is our duty as Alaskans to perform such services when requested, rather than leave the task to scientists imported from elsewhere.

Yours sincerely,



Vera Alexander
Director
Institute of Marine Science

VA:rw

cc: The Honorable Joel Pritchard
U.S. House of Representatives

Mr. D'AMOURS. Thank you very much.

The meeting is adjourned.

[The following was submitted for the record:]

American Petroleum Institute
2101 L Street, Northwest
Washington, D.C. 20037
(202) 457-7300



Charles J. DiBona
President

June 2, 1983

The Honorable John B. Breaux
Chairman
Subcommittee on Fisheries, Wildlife
Conservation and the Environment
U.S. House of Representatives
2113 Rayburn House Office Building
Washington, D.C. 20515

The Honorable Norman E. D'Amours
Chairman
Subcommittee on Oceanography
Committee on Merchant Marine and Fisheries
U. S. House of Representatives
2242 Rayburn House Office Building
Washington, D.C. 20515

Dear Chairmen Breaux and D'Amours:

On March 22, 1983, the American Petroleum Institute submitted comments regarding reauthorization of the Marine Sanctuary Program for your consideration during Subcommittee on Oceanography hearings on H.R. 2062 and H.R. 1633. At that time we favored H.R. 1633 as the appropriate measure to correct the administrative problems that have plagued the Sanctuaries Program.

In your April 5 letter to me, you requested comments on H.R. 2062 which was not ordered reported out of the Merchant Marine and Fisheries until April 27, 1983.

On April 18, 1983, Stephen P. Potter, Senior Vice President of API, responded that we would appreciate the opportunity to comment on H.R. 2062 after the D'Amours/Breaux compromise language had been added to the bill. The attached statement, then, is submitted as the Institute's position on H.R. 2062. I request that this statement be included in the record for the Merchant Marine and Fisheries Committee on this legislation.

Please feel free to contact Jack Ware (457-7287) if you or your staff have any questions regarding the statement.

Sincerely,

AMERICAN PETROLEUM INSTITUTE

STATEMENT FOR THE RECORD

of the

COMMITTEE ON MERCHANT MARINE AND FISHERIES
U. S. HOUSE OF REPRESENTATIVES

regarding

H.R. 2062, a Bill to Reauthorize the Marine Sanctuary Program
Title III, Marine Protection, Research and Sanctuaries Act

In our statement filed with the Committee on March 22, 1983, we mentioned our strenuous objections to the implementation of this program in the past when vast ocean areas have been nominated as sanctuaries for the primary purpose of prohibiting OCS oil and gas leasing and development. In recognition of industry concerns, as well as the concerns of states, environmental organizations and fisheries industry representatives, the Committee ordered H.R. 2062 reported to the House of Representatives for reauthorization of the Marine Sanctuary Program and amendment of Title III, Marine Protection, Research and Sanctuaries Act. We feel this legislation significantly improves the direction of the program and provides the Executive Branch with important new guidance on its implementation.

However, two significant concerns remain. First, section 304(b)(5) fails to preserve valid rights to resource use and/or development that existed prior to sanctuary designation. Second, the issue of appropriate sanctuary size remains unresolved thus leaving room for the designation of vast ocean areas beyond the manageable scope and enforcement capabilities of the sanctuary program officials.

The following section-by-section analysis is intended as constructive criticism of H.R. 2062 on these two points. In addition, we offer API support for the many positive aspects of the legislation.

Section 301. Findings, Purposes, and Policies

- (a) Findings - This subsection is consistent with the Institute's evaluation of the needs for which the Marine Sanctuary Program are best suited.

Purposes and Policies -

"(2) to provide authority for comprehensive and coordinated conservation and management of these marine areas which will complement existing regulatory authorities;..."

The use of the word "complement" is most appropriate in this subsection as it denotes what API trusts is the recognition that the sanctuary program can provide comprehensive and coordinated management of sensitive marine areas without adding new restrictions to ocean uses already adequately protected by existing regulatory authorities.

"(3) to support, promote, and coordinate scientific research on, and monitoring of, the resources of these areas);..."

We hope that the final report on this legislation specifies that scientific research can be one objective of the program without the designation of a sanctuary. Further, research should not be the sole purpose of a sanctuary designation but only one of several values which give certain ocean areas special national significance.

"(5) to facilitate, to the extent compatible with the primary objective of resource protection, all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities."

API's interpretation of this subsection is that OCS oil and gas leasing activities can be facilitated by the sanctuary program where lessees can obtain permits for operations from the Environmental Protection Agency (e.g. clean air and clean water requirements), from the National Marine Fisheries Service (e.g. biological opinions on endangered species), from the Army Corps of Engineers (e.g. navigational safety requirements), and from the Department of the Interior (e.g. exploration, development and production plan approvals). This new policy provides the long overdue congressional recognition that multiple compatible uses of the ocean can be consistent with the conservation and management of nationally significant marine resources. It is recognized that there may be circumstances, like the site of the USS MONITOR Sanctuary, where oil and gas operations should be prohibited in small geographic areas. However, this new commitment to facilitation of ocean uses goes a long way toward eliminating the stereotype of the "sanctuary" program as a program solely devoted to creating refuges in the oceans where man's activities are forbidden.

Section 302 - Definitions

No comment.

Section 303 - Sanctuary Designation Standards

(a) Standards - The Institute has strongly advocated that the marine sanctuary program should not be used as a mechanism to create unnecessary regulation and another layer of bureaucracy where existing authorities at the state and federal levels have been shown to provide adequate safeguards of marine resources in areas with multiple and sometimes competing uses. Subsection (a)(2) finally gives the Commerce Secretary the necessary guidance that a finding of the inadequacy of existing regulation must be made before further regulation through the designation process is contemplated. Moreover, this subsection clarifies the primary purpose of the program: to provide special management regimes for resources of national significance. The Merchant Marine and Fisheries Committee is to be commended for providing this firm guidance which the program has so sorely needed since 1972 when the original statute was first implemented.

"(a)(3) the area is of a size and nature which will permit comprehensive and coordinated conservation and management."

One of our remaining concerns with H.R. 2062 is that of sanctuary size. In 1978, we saw upwards of 200,000 square nautical miles of the Alaska OCS nominated for possible sanctuary sites which were placed on the then "list of recommended areas." Recently, we have seen the site selection process identify portions of virtually every sedimentary basin offshore Alaska for possible nomination to the "site evaluation list" -- again, hundreds of thousands of square miles of ocean. Yet four of the six existing marine sanctuaries are 100 square miles or less and the remaining two are between 900 and 1,300 square miles in area.

With past experience serving as an indicator of the Department of Commerce's view of a "manageable" size, it appears that the Department has found that the smaller sanctuary areas meet the site selection criteria in the majority of cases. One hundred square nautical miles seems a reasonable threshold size for the largest sanctuaries, given the limited financial, administrative, and enforcement capabilities of the Commerce Department. Accordingly, API recommends that the Congress provide more clarification on the geographic scope of future sanctuaries by establishing an upper limit on the size of sanctuaries for "comprehensive and coordinated conservation and management."

- (b) Factors and Consultations Required in Making Findings - Subsection (1)(A)-(I) provides an excellent framework for thorough analysis of each sanctuary candidate.

The factor which addresses the size and manageability of sanctuaries, (b)(1)(F), is helpful in providing important criteria that must be evaluated. However, any notion of the magnitude of potential sanctuary size is lost when the primary

focus of the site selection process is to identify "discrete ecological units with definable boundaries." Therefore, some examples of such units of manageable size, as compared with unmanageable size, are necessary in the report language to provide guidance to the Commerce Department.

For example, the series of coral reef sanctuaries -- i.e. Looe Key, Key Largo, Grays Reef -- are exemplary cases of small, manageable sanctuaries that are also discrete ecological units. Conversely, the single nomination of Nantucket Sound/Shoals and Oceanographer Canyon (1,805 square miles) is an example of two or three discrete ecological units separated by approximately 100 miles of open ocean which are as a whole too large and geographically separated to be manageable.

A new subsection 303(b)(3) requiring the preparation of an environmental impact statement for each sanctuary candidate would have provided an important mandate in the procedural steps toward designation.

Section 304 - Procedures for Designation and Implementation

The establishment of the procedure for notice of the sanctuary proposal together with proposed regulations in the Federal Register and to the cognizant committees of Congress is an appropriate compromise between the status quo and a mandate for congressional designation which API recommended in our comments filed March 22, 1983. This new process should allow greater consideration and a more careful evaluation by all interested parties and the Congress before any final decisions are made by the Commerce Secretary.

One of our major concerns with H.R. 2062, the preservation of valid existing lease rights, stems from Section 304(b)(5) which would create a presumption of validity in favor of "all permits, licenses and other authorizations" issued under any lawful authority "unless the regulations implementing the designation provide otherwise."

Insofar as the presumption of validity created by Section 304(b)(5) can be negated by the adoption of contrary NOAA regulations, the presumption falls short of clearly satisfying the Constitution's Fifth Amendment guarantee against a taking without just compensation. The mere acquisition of permits and licenses involves very high costs; operations conducted under such permits and licenses represent another substantial outlay. To render such rights invalid after they have been acquired and exercised is not only confiscatory but also unnecessary since permits and licenses are not granted without stringent environmental safeguards.

Accordingly, the last clause of Section 304(b)(5) should be stricken.

Section 305 - International application of Regulations and Negotiations

No comment.

Section 306 - Research

No comment.

Section 307 - Annual Report on Areas Being Considered for Designation

We are concerned that the establishment of this annual report requirement may create a de facto withdrawal of the identified areas from OCS leasing by virtue of the simple inclusion of the areas in the annual report. The fact that an area is on the list of active candidates or on the recently proposed "site evaluation list" (48 FR 8527, March 1, 1983), should not afford those sites any special protections from multiple ocean uses until a Secretary of Commerce finding has been made that a particular site has resource values of national significance and that the sanctuary designation or rejection process is completed. We trust that report language on H.R. 2062 will make some provision against such unintended use of the annual report and site evaluation list procedure.

Section 308 - Enforcement

No comment.

Section 309 - Authorization of Appropriations

The funding levels appear to be appropriate to maintain the level of activity currently authorized and to allow for additional resources for future sanctuary designations.

Conclusion

H.R. 2062 is a substantial improvement in the legislative mandate for the Marine Sanctuary Program. If enacted into law, the bill will provide the Department of Commerce with better criteria and procedures to guide the sanctuary site selection and designation process. We trust that the two significant problems outlined above -- protection of valid existing rights and sanctuary size -- will be addressed during floor debate on this measure.



The Texas Shrimp Association

403 Vaughn Building Austin, Texas 78701
Tel. (512) 476-8446, 476-8447

March 11, 1983

Honorable John Breau, Chairman
Fisheries, Wildlife Conservation &
the Environment Subcommittee
U.S. House of Representatives
Washington, D.C. 20515

Dear Congressman Breau:

Thank you for the opportunity to submit comments for the record on the reauthorization of the National Marine Sanctuaries Program and HR 1633.

The Texas Shrimp Association is a trade association for the shrimp industry of Texas with membership consisting of Texas residents as well as residents of other Gulf States. We are a harvester level association with our members taking shrimp from the Gulf of Mexico.

The Texas Shrimp Association is supportive of the concept of preserving or restoring marine areas for their conservation, recreational, ecological or esthetic values. We encourage participation of fishermen, industry, federal, state and local agencies and the general public in the review, naming and operating of these areas as sanctuaries.

We firmly support the many research activities conducted in unique marine habitats which aid in the understanding of the marine ecosystem and thereby in protecting the resources. Results from such research can be instrumental in effectiveness and the impacts of human activities on marine resources.

To date, there have been no marine sanctuaries designated in Texas. There are, however, two areas - Baffin Bay and Flower Garden Reefs - listed in the site evaluation list published March 1, 1983, in the Federal Register. The Flower Garden Reefs, in the Northwest Gulf of Mexico, had been considered several years ago for designation as a marine sanctuary. TSA submitted a letter in support of the establishment of a marine sanctuary to protect this northernmost coral reef in the Gulf of Mexico. As a user of living marine resources, we recognize the value of preservation of unique areas and the harm that could come to these areas by dredging, filling, and mineral extraction. Our caution would be against needless interference with legitimate and compatible uses of the marine environment. We believe section 302(3)(b)(4) of HR 1633 adequately addresses this issue.

TSA believes that prior to designating a specific marine sanctuary, proponents should first consider existing statutes - such as the ESA, MMPA, OCS Lands Act, CZMA, and MFCMA - to determine the level of existing protection for the sensitive marine areas. If there is sufficient protection by these statutes and the regulations therein, TSA believes that the designation of a marine sanctuary may be superfluous.

While we are supportive of the congressional intent of marine sanctuaries, we are troubled by a statement made at the February 24 hearing that the establishment of a marine sanctuary does not guarantee a continuation of commercial fishing. We view a marine sanctuary as a multiple-use area; not an area where all activities should be prohibited. A sanctuary is actually a marine park where activities are monitored so that the area's richness can be preserved.

We do not believe that a marine sanctuary designation should be used as a fishery management tool. The MFCMA was passed as a management tool of fishery resources. If fishery regulations were also promulgated under Title III of the Marine Protection, Research and Sanctuaries Act, a complicated, confusing situation would be created.


We support a marine sanctuary program which is closely coordinated with the fishery management councils and the NMFS. Fishing activity should be controlled by them. We do not believe that the Secretary of Commerce should be able to prohibit fishing activity in a sanctuary area under the Marine Protection, Research and Sanctuaries Act without working within the confines of the MFCMA and the fishery management councils.

HR 1633 would change the marine sanctuaries program from an administrative program with congressional approval/disapproval to a congressional program requiring legislation. We believe the marine sanctuary program is one of national interest, and therefore, an appropriate area for congressional oversight ensuring that all parties are heard in the decision process. However, we are concerned that the requirement of congressional designation not be used to defeat the effectiveness of the program. It is possible that congressional designation could be used as a mechanism to delay essential designations; thus delaying the protection of critical habitat and nursery grounds. We would like to see those marine sanctuaries which meet the established criteria be designated as quickly as possible to ensure the preserva-

tion of the area. The emergency action provisions under section 307 of HR 1633 appear to provide adequate protection where there may be an imminent threat to or irretrievable loss of resources. These provisions would protect the resource during congressional deliberations.

In summary, TSA is supportive of the designation of multiple-use marine sanctuary parks by Congress. We would urge that designations deemed necessary be made in a timely manner and that there be a step by step consultation with NMFS as well as appropriate fishery management councils throughout the designation process. Furthermore, we urge that fishery activities in designated areas be controlled by existing fishery authorities.

Sincerely,



Ralph Rayburn
Executive Director

MEMBER STATES

ALASKA
CALIFORNIA
IDAHO
OREGON
WASHINGTON

PACIFIC MARINE FISHERIES COMMISSION

528 S.W. MILL STREET
PORTLAND, OREGON 97201
PHONE (503) 229-5840

EXECUTIVE DIRECTOR

JOHN P. HARVILLE

TREASURER

G. L. FISHER

February 18, 1983

Honorable Joel Pritchard, Member
Subcommittee on Oceanography of the
Merchant Marine and Fisheries Committee
House of Representatives
Washington, DC 20515

RE: Reauthorization of the
National Marine Sanctuary
Program, Title III of the
Marine Protection, Research,
and Sanctuaries Act of 1972

Dear Mr. Pritchard:

I am John P. Harville, Executive Director of the Pacific Marine Fisheries Commission, comprised of the five Pacific States of Alaska, California, Idaho, Oregon, and Washington. I wish to submit for the record these comments concerning the National Marine Sanctuary Program, first noting some of the original concerns which existed prior to the inception of that program, then summarizing the text of a Resolution unanimously approved by the five Compact States, and finally offering my own perspectives of mechanisms which have proved effective in developing broad-based public support for designation of selected National Marine Sanctuaries.

Over the early years of operation, the National Marine Sanctuary Program generated apprehension among fisheries interests due to concerns that a new and unnecessary level of Federal authority would usurp State and Regional Council authority to conserve and manage the living marine resources within their respective jurisdictions. Fishermen and the boating community feared that Sanctuary authority would be used to prevent their access to valuable traditional fishing and boating areas.

At the same time, both users and managers of the marine environment recognize the matchless values to the nation of preservation of selected unique areas; also they fully recognize the vulnerability of critical marine habitats to irreversible degradation by dredging and filling, and by mineral extraction. Therefore they appreciate and can support the basic concepts of critical habitat protection embodied in the stated goals of the National Marine Sanctuary Program. They do insist, however, that those goals be achieved without needless interference with other legitimate and compatible uses of the marine environment. Notably this concern appears consistent with the fourth Program Goal cited in a recent NOAA brochure--to "provide for maximum compatible public and private use of special marine areas."

Pacific Coast fisheries interests have been favorably impressed by the successes achieved in California in establishing two National Marine Sanctuaries which achieve National Program goals and at the same time preserve and enhance traditional fisheries and recreational boating activities. I will comment further on the apparent reasons for this successful melding of needs and uses, but first wish to commend to your attention a Resolution unanimously approved by the five Pacific States comprising the Pacific Marine Fisheries Commission (PMFC) at the Commission's Annual Meeting last November. That Resolution recognizes the values of preserving or restoring selected areas for their "conservation, recreational, ecological, or esthetic values", and notes that many proposed marine sanctuaries contain areas which support important commercial, recreational, and subsistence fishery activities. The Resolution therefore asserts that the Pacific Marine Fisheries Commission can support "designation of only those marine sanctuaries which guarantee fishery usages and recognize the fisheries management authority of current State or Federal agencies within the sanctuary boundaries." (The full text of this Resolution is attached.)

The positive tone of this Resolution clearly reflects the constructive approaches and mutually supportive outcomes of the discussions and negotiations which created the Channel Islands National Marine Sanctuary off Southern California, and the Point Reyes-Farallon Islands National Marine Sanctuary offshore and north of San Francisco. I am confident that any Resolution adopted a few years ago, prior to the successful California experience, would have stated only general opposition by fisheries interests to the entire program.

Because the California experience well illustrates multiple-use accommodations in protection and management of marine resources, I cited the National Marine Sanctuaries Program as illustrative of intergovernmental cooperation for multiple use of coastal and marine resources at a national symposium sponsored by the International Association of Fish and Wildlife Agencies and the American Fisheries Society last September. I have attached for your reference the relevant sections of that presentation.

In that paper, I noted that one of the continuing problems besetting the program is its unfortunate label. To many, the term sanctuary implies total protection; all uses other than observation and aesthetic enjoyment would be prohibited. I believe much of this reflex suspicion could be laid to rest if we changed the name of the program to something more accurate in connotation--National Marine Reserves, perhaps.

The National Marine Sanctuary Program was conceived with truly laudible goals--to designate selected ocean areas as marine sanctuaries to protect or restore their conservation, recreational, ecological, or aesthetic values. The enabling legislation specifies a rigorous series of steps for both nomination and approval of proposed sanctuary sites, and mandates extensive public participation along all steps of the way. The Act further specifies close coordination between Federal officials and the coastal zone management agencies of affected States, and provides that if the Governor of an affected State finds the terms of any designation to be unacceptable, he may require that sanctuary regulations not be applicable within State waters until (and if) the terms of management become acceptable to the State.

The California experience in interagency and public participation in the decision processes illustrates that these mechanisms can be productive. As noted earlier, State officials and the fishing industry originally looked askance at proposals to designate as National Marine Sanctuaries the Channel Islands off Southern California, and the Point Reyes-Farallon Islands off San Francisco. These projects were permitted to move forward only after all concerned became reassured that State authority over State waters and resources would not be infringed, and that new and onerous restrictions would not be imposed on commercial and recreational fishing activities.

The Presidential proclamation on September 21, 1980 approving the Channel Islands Marine Sanctuary effectively presents both national goals of the Marine Sanctuaries program, and regional safeguards which assure a multiple-use result. The President's message reviewed the local initiatives which led to designation of California's Channel Islands for Sanctuary status, and the safeguards which insure a truly multiple-use status for those resources. He stressed the close working relationships which had been developed with local and State governments and concerned citizens, noting that the Channel Islands Sanctuary had been nominated originally by California's Resources Agency, Santa Barbara County, and the National Park Service, and that this status is supported by California's Governor and by members of the California Congressional delegation. The President noted that much of the public dialog about the proposal was carried on through the California Coastal Commission.

The President's message emphasized both the unique character of the Islands which merit national protection, and the necessity to avoid unnecessary inhibition of other legitimate uses for the sanctuary area:

"The area clearly deserves marine sanctuary status. The islands and surrounding waters are an exceptionally productive ecosystem. They provide feeding and breeding grounds for one of the largest and most varied assemblages of seals and sea lions in the world. They are one of the richest resource areas in the United States for marine birds, including the endangered brown pelican. The area has become particularly important as the pressures of human development have driven these species from one refuge after another on the mainland...

"The sanctuary will not inhibit activities around the islands such as fishing, recreational boating and existing hydrocarbon leases, but will prohibit new oil and gas leases within the boundaries. These and other aspects of the marine sanctuary will provide protection for the wildlife, marine animals and flora and fauna of the islands."

In January 1981, President Reagan cited similarly unique environmental qualities for designation of the Point Reyes-Farallon Islands National Marine Sanctuary. President Reagan also emphasized the case-by-case nature of Sanctuary nomination and designation, and the need to balance carefully, on the basis of broad public input, the special reserve characteristics meriting sanctuary status, and other legitimate uses of sanctuary areas on the national welfare.

I commend this evolutionary development of the Marine Sanctuary Program as a useful instance of Federal-State-local coordination of intention and effort, and as an excellent illustration of carefully planned multiple-use of selected

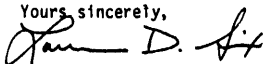
unique portions of our marine environment. Special physiographic, biological, and ecological values are assured of preservation for future generations, and at the same time, other valid uses are legitimized by Federal-State-local agreements. Moreover, these cooperative interactions at governmental levels appear to offer cost-effective benefits to the public through a pooling of scarce resources. For the two California Sanctuaries, for example, Marine Sanctuary funds support additional marine wardens to augment the already efficient enforcement capabilities of the California Department of Fish and Game. The National Park Service operates well-organized public information and education services. The State continues to manage the fisheries resources of the area. An effective interface with University scientists and the private sector generally is assured through Marine Sanctuary financial support of a Coordinator attached to the Marine Region of the California Department of Fish and Game.

Mr. Pritchard, I hope that these illustrations demonstrate essential elements to successful implementation of the National Marine Fisheries Sanctuary Program. I consider the key to be the multiple-use concept--the premise that compatible uses will be protected and established jurisdictional authorities maintained to the fullest extent possible in designation of marine sanctuaries. While I believe this was the intent of Congress in establishing the Act, I believe it could be made more explicit, at very least in the Committee report on reauthorization. Perhaps the California experience could be cited as a useful example.

Finally, I do respectfully recommend that you consider a change in name. As noted earlier, "sanctuary" has restrictive connotations which could be avoided by use of "reserve" or another better descriptor.

Please call on me or any of PMFC's member States if we can provide further information useful to you and your Subcommittee.

Yours sincerely,



for John P. Harville
Executive Director

JPH:dmw

Attachment: PMFC 1982 Resolution 8
Improving Multiple Use of Coastal and Marine Resources

PACIFIC MARINE FISHERIES COMMISSION RESOLUTION NO. 8

FISHING ACTIVITIES IN MARINE SANCTUARIES

WHEREAS, the marine sanctuary program was established to preserve or restore areas for their conservation, recreational, ecological, or esthetic values; and

WHEREAS, few marine sanctuaries have as yet been designated in the United States so the benefits of this particular program are difficult to assess; and

WHEREAS, many proposed marine sanctuaries contain areas which support important commercial, recreational, and subsistence fishery activities; and

WHEREAS, nothing in the current marine sanctuary legislation or proposed regulations guarantees any level of continued fishing activities in the marine sanctuaries; and

WHEREAS, the currently proposed regulations may transfer fisheries management authority in a sanctuary to the Federal office of Coastal Zone Management;

THEREFORE BE IT RESOLVED, that the Pacific Marine Fisheries Commission supports the designation of only those marine sanctuaries which guarantee fisheries usages and recognize the fisheries management authority of current State or Federal agencies within the sanctuary boundaries.

Adopted unanimously by the five
Compact States of Alaska, California,
Idaho, Oregon, and Washington on
November 16, 1982 at Monterey, California

IMPROVING MULTIPLE USE OF COASTAL AND MARINE RESOURCES

COOPERATION AMONG USERS--FISHERIES¹

by

John P. Harville, Executive Director
Pacific Marine Fisheries Commission, Portland Oregon

INTRODUCTION

For three interlocking reasons, I believe we fish and wildlife scientists and managers must seek actively for acceptably compatible multipurpose uses of the environmental resources which are essential for future fish and wildlife productivity. First, the demand curve continues to climb for public access to fish and wildlife, for food, for recreation and esthetic enjoyment, and for economic benefits. At the same time, critical habitats and environmental conditions essential to fish and wildlife continue to diminish in both extent and quality under the consuming impacts of population growth and associated technology (Noonan and Zagata, 1982).

Second, as direct consequence of these closing curves of demand and supply which constrain the quality and quantity of environmental resources available to us, the long-term well-being of fish and wildlife resources under our stewardship very well may depend ultimately upon our ability to broaden public support for protection of critical habitats and essential environmental qualities. Clearly that public support will expand naturally whenever additional uses for essential habitats or other environmental resources can be identified and endorsed as reasonably compatible with fish and wildlife needs. That broadened support base will be strengthened if significant reciprocal benefits are perceived from these compatible uses.

The third factor driving us toward multiple-use sharing of scarce environmental resources is a pragmatic recognition that in today's economic and political climate, public support is essential for all major environmental decisions and commitments (Smith, 1975). Federal legislation of the '70s (e.g., NEPA and MFCMA) mandated rigorous public review and approval procedures on environmental issues. Increasingly aggressive political activism over the past several decades has established the power of general public opinion on environmental issues as a significant force in addition to the more traditional pressures from directly affected users. It follows naturally that, particularly for elected officials, broad-scale public approval of a given project, and absence of significant public controversy over it, may be far more significant factors favoring approval than are a few additional points in the benefit-cost ratio.

¹Contribution to Symposium at Hilton Head, South Carolina, September 22, 1982, Jointly sponsored by International Association of Fish and Wildlife Agencies and American Fisheries Society.

The National Marine Sanctuaries Program.

From a fisheries point of view, probably no Federal program in recent years has generated more uneasiness than the National Marine Sanctuaries Program, which often has been perceived as a threat to the future of fisheries operations generally, and as yet another example of Federal encroachment on existing State and local jurisdictions and authorities. Probably this has stemmed as much from the unfortunate label for the program as from the actual provisions of the Act. To many, the term sanctuary implies total protection; therefore a locking away of major portions of the diminishing environment from any use other than observation and aesthetic enjoyment. I believe much of this reflex suspicion could be laid to rest if we changed the name of the program to something more accurate in connotation--National Marine Reserves, perhaps.

The National Marine Sanctuary Program was conceived with truly laudible goals--to designate selected ocean areas as marine sanctuaries to protect or restore their conservation, recreational, ecological, or aesthetic values (NOAA, 1982). The enabling legislation specifies a rigorous series of steps for both nomination and approval of proposed sanctuary sites, and mandates extensive public participation along all steps of the way. The Act further specifies close coordination between Federal officials and the coastal zone management agencies of affected States, and provides that if the Governor of an affected State finds the terms of any designation to be unacceptable, he may require that sanctuary regulations not be applicable within State waters until (and if) the terms of management become acceptable to the State.

These provisions for public input and close interactions with the State have led to truly multiple-use approaches to protection and management of certain unique natural areas. In California, for example, both State officials and the fishing industry originally looked askance at proposals to designate as National Marine Sanctuaries the Channel Islands off Southern California, and the Point Reyes-Farallon Islands off San Francisco. These projects were permitted to move forward only after all concerned became reassured that State authority over State waters and resources would not be infringed, and that new and onerous restrictions would not be imposed on commercial and recreational fishing activities.

The Presidential proclamation on September 21, 1980 approving the Channel Islands Marine Sanctuary effectively presents both national goals of the Marine Sanctuaries program, and regional safeguards which assure a multiple-use result. In his prefatory remarks, the President noted:

"More than a century ago, Americans with a clear vision of the future began to set aside as National Parks our land's most magnificent national wonders. Today, in this Year of the Coast (1980), it is most fitting that we demonstrate our concern for future generations by extending comprehensive protection to the marine equivalents of Yosemite, Big Band, the Great Smokies, and the Everglades."

The President's message reviewed the local initiatives which led to designation of California's Channel Islands for Sanctuary status, and the safeguards which insure a truly multiple-use status for those resources. He stressed the close working relationships which had been developed with local

agreements. Moreover, these cooperative interactions at governmental levels appear to offer cost-effective benefits to the public through a pooling of scarce resources. For the two California Sanctuaries, for example, Marine Sanctuary funds support additional marine wardens to augment the already efficient enforcement capabilities of the California Department of Fish and Game. The National Park Service operates well-organized public information and education services. The State continues to manage the fisheries resources of the area. An effective interface with University scientists and the private sector generally is assured through Marine Sanctuary financial support of a Coordinator attached to the Marine Region of the California Department of Fish and Game.

As final illustration of interagency cooperation to resolve a multiple use problem, let me skip 3,000 miles to the Key Largo National Marine Sanctuary off the coast of Florida.

Among the problems to be resolved in human use of any reserve area is management of that use to minimize its adverse impact on the critical habitats to be protected. For coral reefs of Florida's parks and sanctuaries, boat anchor damage may be a more serious threat than coral collecting, or such coral predators as "crown of thorns" starfish, brittleworms, and parrot fish (Davis, 1977). Anchors dropped upon fragile staghorn and elkhorn coral beds can reduce an area around that anchorage to broken rubble as the boat swings at anchor and the anchor-chain cuts a swath through brittle coral structures (Halas, 1982).

In order to provide safe and convenient anchorages over prime coral beds of French Reef, in Key Largo National Marine Sanctuary, researchers in July, 1981 cemented stainless-steel eyebolts into holes drilled at selected sites in the dead coral reef-base, and floated polypropylene mooring lines from those eyebolts to surface buoys equipped with pick-up lines. These experimental mooring systems were designed stoutly enough to secure vessels up to 65 feet in length in moderate seas. Leaders of the Keys Association of Dive Operators, a principle user group to be served, assisted in site selection and evaluation of results.

Preliminary evaluations show minimal damage to fragile coral structures, since lines float above them without heavy chains to cut a swath around the anchor point. Further, public reaction has been generally favorable. Anchoring to the floats is quicker, easier, and safer than searching for a suitable anchorage off the reef, particularly in marginal weather. Divers report a more satisfying underwater experience, minus the rattle and clank of anchors and chains, and under more nearly pristine viewing conditions.

I am advised that multiple-use planning for development of Florida's Parks and Sanctuaries may develop clusters of these special mooring buoys in specially selected areas, and encourage their use by divers in order to protect unique assemblages of corals in as near-pristine condition as possible. Other and far more extensive areas will of course remain open to general use and more conventional anchorage methods.

[Whereupon, at 12:45 p.m., the subcommittees recessed, to reconvene at the call of the Chair.]

REAUTHORIZATION AND OVERSIGHT OF TITLE I

TUESDAY, MARCH 15, 1983

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON OCEANOGRAPHY AND SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT, COMMITTEE ON MERCHANT MARINE AND FISHERIES,

Washington, D.C.

The subcommittees met, pursuant to call, at 12 o'clock noon in room 1334, Longworth House Office Building, Hon. Norman E. D'Amours (chairman of the Subcommittee on Oceanography) presiding.

Present: Representatives D'Amours, Hughes, Tauzin, Dyson, Carper, Boxer, Forsythe, Schneider, Bateman, and McKernan.

Staff present: Howard Gaines, Darrell Brown, Mary Pat Barrett, Tom Kitsos, Will Stelle, Susan Wade, Debbie Storey, Margaret O'Bryon, George Pence, Barbara Wyman, and Bob Deibel.

Mr. D'AMOURS. The Subcommittee on Oceanography and the Subcommittee on Fisheries and Wildlife Conservation and the Environment meet today to receive testimony on H.R. 1761, a bill to reauthorize and amend the Marine Protection, Research and Sanctuaries Act of 1972. This act is more commonly referred to as the Ocean Dumping Act.

I look forward to today's testimony to see how far we have come in the debate over U.S. ocean dumping policy in the last year.

As many of you will remember, I introduced H.R. 6113 last year to try to address some serious concerns caused by a controversial court interpretation of the Ocean Dumping Act which threatened to dramatically increase the level of dumping of municipal sewage sludge.

The bill received spirited debate and certain of the amendments were subsequently withdrawn as the result of a lack of consensus on the explicit role of the ocean in a comprehensive waste management strategy.

In the end, the subcommittee chose to limit its focus to provisions regarding the designation of suitable dumping sites and the future dumping of low-level radioactive wastes.

The questions regarding sewage sludge and the court decision were put off in favor of a 1-year reauthorization which would allow us to closely monitor the Environmental Protection Agency's implementation of the court decision.

Unfortunately, I anticipate we will hear today from EPA that few, if any, of the key questions regarding implementation of the so-called *Sofaer* decision have yet been resolved.

The remaining provisions of H.R. 6113 passed the House under suspension of September 20 but were never acted upon by the Senate. However, the bill's radioactive waste provisions, specifically a 2-year moratorium on the dumping of low-level waste and extensive special provisions to be complied with after the moratorium expires, were attached to the highway bill as a result of the diligent work of our colleague, Mr. Anderson and that provision is now law.

The bill before us today, H.R. 1761, is similar to H.R. 6113 except that it contains no radioactive waste provisions.

I am pleased that a number of the members of the subcommittee have agreed to cosponsor the legislation and I hope that we can take early action on it.

In summary, the provisions of the bill we are holding hearings on, in addition to reauthorizing the act, seek to guarantee that, to the extent we must dump, we do all we can to make sure we have selected the most appropriate dumping sites, that they have been sufficiently studied, and that the subsequent dumping is adequately monitored.

To accomplish these ends, the bill changes the Administrator's heretofore discretionary authority to perform permanent site designation procedures to a mandatory duty; it requires the Administrator to establish an explicit schedule for completing site designation studies and provides interested parties with the right to seek a writ of mandamus when those studies are not completed; and it requires the Administrator to develop appropriate monitoring programs.

Finally, the bill changes a discretionary permit processing fee to a mandatory one, and it seeks to clarify our obligations under this act to follow the provisions of the London Dumping Convention.

While the hearing deals with H.R. 1761 and reauthorization of the Ocean Dumping Act, I note that EPA's testimony—pages 17-19—makes reference to the Seventh Consultative Meeting of the Contracting Parties to the London Dumping Convention [LDC] which was held in London last month at which I was a congressional advisor to the U.S. delegation. One of the main issues under discussion concerned radioactive waste dumping and specifically a proposal by the Pacific island nations of Nauru and Kiribati to amend the annexes of the Convention to prohibit the dumping of all radioactive waste. I take exception to EPA's interpretation of the debate over this issue as stated in its testimony.

First, to claim that the Spanish resolution calling for a suspension on the disposal of all radioactive waste while the issue was being reviewed by appropriate scientific bodies would have the effect of amending Annexes I and II of the Convention and therefore be binding upon contracting parties is without merit. Resolutions are resolutions and amendments are amendments. Several international legal experts and the Spanish delegation itself stated that a resolution was not tantamount to an amendment to the Annexes and would not be legally binding. Rather, the resolution called on all nations to make a good faith effort to suspend radioac-

tive waste dumping while the issue was being reviewed by technical experts.

Second, the claim that the resolution abrogated the normal procedures of the Convention and its Rules of Procedure is also without merit. LDC Res. 10(V)—Procedures for Preparation and Consideration of Amendments to the Annexes to the London Dumping Convention—calls for scientific and technical review of any proposed amendment. There was general agreement among delegates to the meeting that the scientific basis for the proposal of Nauru and Kiribati to ban radioactive waste dumping be reviewed by an expert group. Indeed, Nauru and Kiribati agreed to table their proposal pending such review consistent with LDC Res. 10(V). But no similar rule of procedure exists for resolutions. Thus it is a mistake to claim that the rules of procedure were abrogated.

The most important point, however, is that by holding onto tenuous legalities and opposing the Spanish resolution, the United States jeopardized its traditional leadership role in ocean protection issues. Despite the fact that the resolution was discussed formally and informally for four days, the U.S. made no attempt to modify the resolution into an acceptable document until after the voting process had already begun and by then it was clearly too late. It is unfortunate that the U.S. delegation reflected attitudes that are antagonistic to the type of ocean pollution control efforts embodied by the actions and legislative decisions of Congress. It is also unfortunate that the obstructionist position of the United States served to polarize an international body that traditionally functions on a consensus basis.

[The bill and departmental report follows:]

98TH CONGRESS
1ST SESSION

H. R. 1761

To amend title I of the Marine Protection, Research, and Sanctuaries Act of 1972.

IN THE HOUSE OF REPRESENTATIVES

MARCH 2, 1983

Mr. D'AMOURS (for himself, Mr. JONES of North Carolina, Mr. FORSYTHE, Mr. STUDDS, Mr. BIAGGI, and Mr. HUGHES) introduced the following bill; which was referred to the Committee on Merchant Marine and Fisheries

A BILL

To amend title I of the Marine Protection, Research, and Sanctuaries Act of 1972.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That this Act may be cited as the "Ocean Dumping Amend-
4 ments Act of 1983".

5 SEC. 2. DUMPING PERMIT PROGRAM.

6 (a) Section 102 of the Marine Protection, Research, and
7 Sanctuaries Act of 1972 (33 U.S.C. 1412) is amended—

8 (1) by amending subsection (a)(C) by striking out

9 "and beaches." and inserting in lieu thereof "beach-

10 es, and wetlands."; and

1 (2) by amending subsection (c) to read as follows:

2 “(c)(1) The Administrator shall designate sites at which
3 materials may be dumped pursuant to this section and, after
4 consultation with the Secretary, at which materials may be
5 dumped pursuant to section 103; except that no site may be
6 designated by the Administrator under this subsection until
7 the Administrator undertakes and completes an analysis of
8 the characteristics of the site and its suitability for dumping
9 and of the environmental effects which will likely result from
10 dumping. In undertaking such an analysis of each site, the
11 Administrator shall take into consideration the criteria set
12 forth in subsection (a) and shall specifically take into account
13 the following factors:

14 “(A) The types and quantities of wastes and pol-
15 lutants projected to be deposited in, and adjacent to,
16 the site from dumping and other sources.

17 “(B) The ability of the waters at the site to dis-
18 perse, detoxify, or neutralize the materials.

19 “(C) The importance of the site to the surround-
20 ing biological community, including the presence of
21 breeding, spawning, nursery or foraging areas, migra-
22 tory pathways, or areas necessary for other functions
23 or critical stages in the life cycle of marine organisms.

24 “(D) The immediate and cumulative effects on
25 human health and on the ecosystem adjacent to the

1 site and the persistent effects on the ecosystem within
2 the site.

3 Nothing contained in this paragraph shall be construed to
4 limit the authority of the Secretary under section 103.

5 “(2) The Administrator shall—

6 “(A) periodically monitor, or cause to be moni-
7 tored, the effects of the dumping of materials at or ad-
8 jacent to each site for which the Administrator deter-
9 mines, on the basis of the characteristics of the site
10 and the materials to be dumped, that such monitoring
11 is necessary to accomplish the purposes of this title;
12 and

13 “(B) at the close of the third year after the site
14 designation and at every three-year interval thereafter
15 until such time as the designation is terminated, esti-
16 mate the extent of the dumping and other waste inputs
17 that will occur in and adjacent to each site during the
18 next three-year period.

19 “(3) If at any time the Administrator, on the basis of the
20 factors taken into account under subparagraphs (A) through
21 (D) of paragraph (1), or on the basis of the monitoring or
22 estimates, or both, required under paragraph (2), determines
23 that the site is no longer suitable for such dumping, the Ad-
24 ministrator shall—

1 “(A) limit dumping at the site to certain materials
2 or at certain times or both; or

3 “(B) suspend or terminate the designation of the
4 site under paragraph (1).

5 In making a determination under the preceding sentence that
6 a site is no longer suitable for dumping pursuant to section
7 103, the Administrator shall consult the Secretary.”.

8 (b) Section 103(b) of the Marine Protection, Research,
9 and Sanctuaries Act of 1972 (33 U.S.C. 1413(b)) is amended
10 by striking out “recommended” in the last sentence.

11 **SEC. 3. PERMIT CONDITIONS.**

12 Section 104 of the Marine Protection, Research, and
13 Sanctuaries Act of 1972 (33 U.S.C. 1414) is amended as
14 follows:

15 (1) Subsection (a) is amended to read as follows:

16 “(a) Permits issued under this title shall designate and
17 include—

18 “(1) the type of material authorized to be trans-
19 ported for dumping or to be dumped;

20 “(2) the amount of material authorized to be
21 transported for dumping or to be dumped;

22 “(3) the location where such transport for dump-
23 ing will be terminated or where such dumping will
24 occur;

1 “(4) the length of time for which the permits are
2 valid and their expiration date;

3 “(5) any special provisions deemed necessary by
4 the Administrator or the Secretary, as the case may
5 be, to minimize the harm from dumping, which may in-
6 clude measures that the permittee must take to plan,
7 develop, acquire, or implement, as appropriate—

8 “(A) alternatives for the disposal of the ma-
9 terial,

10 “(B) processes for reducing or eliminating
11 any contaminants in the material, or

12 “(C) processes for recycling the material;

13 “(6) after consultation with the Secretary of the
14 Department in which the Coast Guard is operating,
15 any special provisions deemed necessary by the Admin-
16 istrator or the Secretary, as the case may be, for the
17 monitoring and surveillance of the transportation or
18 dumping; and

19 “(7) such other matters as the Administrator or
20 the Secretary, as the case may be, deems appropri-
21 ate.”.

22 (2) Subsection (b) is amended to read as follows:

23 “(b) The Administrator or the Secretary, as the case
24 may be, shall prescribe and collect from the applicant, unless
25 the applicant is a Federal agency, an application fee in an

1 amount commensurate with the reasonable administrative
2 costs incurred or expected to be incurred by the Administra-
3 tor or Secretary in processing the permit. The application fee
4 shall be deposited to the principal appropriation account or
5 accounts used to carry out the processing of permits under
6 this title.”.

7 (3) The following new subsection is added at the
8 end thereof:

9 “(h) The Administrator or Secretary, as the case may
10 be, may prescribe such reporting requirements as he or she
11 deems appropriate with regard to actions taken by permittees
12 pursuant to permits issued under this title.”.

13 **SEC. 4. CONVENTION ADHERENCE.**

14 Section 106 of the Marine Protection, Research, and
15 Sanctuaries Act of 1972 (33 U.S.C. 1416) is amended by
16 adding at the end thereof the following new subsection:

17 “(g) To the extent that they may do so without relaxing
18 the requirements of this title, the Administrator and the Sec-
19 retary shall adhere to and apply the requirements of the Con-
20 vention, including its annexes, that are binding upon the
21 United States.”.

22 **SEC. 5. TRANSITIONAL PROVISIONS.**

23 Until completion of the site designation or denial of site
24 designation by the Administrator of the Environmental Pro-
25 tection Agency with respect to any areas of ocean waters

1 approved for dumping on an interim basis before July 1,
2 1982, and any areas of ocean waters used for dumping pursu-
3 ant to a court order, the amendments made by this Act to the
4 Marine Protection, Research, and Sanctuaries Act of 1972
5 (other than subsection (c)(2) and (3) of section 102 thereof as
6 added by section 2(a)(2) of this Act and other than those
7 made by sections 3, 7, 8, and 9 of this Act) shall not be
8 applicable to those areas of ocean water.

9 **SEC. 6. DEFINITIONS.**

10 Section 3 of the Marine Protection, Research, and Sanc-
11 tuaries Act of 1972 (33 U.S.C. 1402) is amended—

12 (1) by inserting “, and the subjacent areas,” im-
13 mediately after “those waters” in subsection (b); and

14 (2) by adding at the end thereof the following new
15 subsection:

16 “(m) ‘Monitoring’ means the systematic, time-series ob-
17 servation of materials, contaminants, or pertinent compo-
18 nents of the marine ecosystem over a period of time sufficient
19 to determine the existing levels, trends, and natural vari-
20 ations of measured components in the water column, sedi-
21 ments, and biota for the purpose of ensuring that immediate
22 harmful effects of dumping are detected, and cumulative and
23 long-term effects are detected, forecasted, and evaluated. Ob-
24 servations may include, but are not limited to, the following
25 procedures, depending upon the type of waste to be dumped

1 and the characteristics of the site: (1) seasonal sampling and
2 analyses of the infaunal community and sediment for pur-
3 poses of characterizing structural composition and size distri-
4 bution; (2) sampling and analyses of sediment and selected
5 organisms to determine levels of hydrocarbon, trace metals,
6 and chemical and pathogenic contaminants identified as con-
7 stituents of wastes to be dumped; (3) profiling measurements
8 of standard oceanographic parameters including dissolved
9 oxygen, salinity, and water temperature; (4) characterization
10 of large-scale surface topography and megafaunal structure
11 and composition; and (5) sampling and analyses to determine
12 levels of nutrients and organic carbon.”.

13 **SEC. 7. WRITS OF MANDAMUS.**

14 Section 105(g) of the Marine Protection, Research, and
15 Sanctuaries Act of 1972, (33 U.S.C. 1415) is amended—

16 (1) by redesignating subparagraph (5) as subpara-
17 graph (6) and by inserting immediately after paragraph
18 (4) the following:

19 “(5) Upon application of any person, the district courts
20 of the United States shall have jurisdiction to issue writs of
21 mandamus commanding the Administrator to implement in a
22 timely manner the site designation provisions of this title, as
23 applicable either pursuant to court order or upon application
24 for a permit under section 102 or section 103, except that
25 nothing in this paragraph is intended to affect the conduct of

1 any dumping activity under a permit issued under this title
2 pending the completion of site designation proceedings. Para-
3 graph (4) of this subsection shall not apply to any suit
4 brought pursuant to this paragraph.”;

5 and

6 (2) by striking out “injunctive” in subparagraph
7 (6), as so redesignated.

8 **SEC. 8. SCHEDULE FOR COMPLETION.**

9 The Administrator of the Environmental Protection
10 Agency shall establish a schedule for expeditiously complet-
11 ing the study and designation or denial of designation of all
12 areas of ocean waters approved before July 1, 1982, for
13 dumping on an interim basis and areas of ocean waters used
14 for dumping pursuant to a court order. The Administrator
15 shall submit this schedule to Congress not later than the one
16 hundred and eightieth day after the date of enactment of this
17 Act.

18 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

19 Section 111 of the Marine Protection, Research, and
20 Sanctuaries Act of 1972 (33 U.S.C. 1420) is amended by
21 striking out “and” immediately following “fiscal year 1981,”
22 and inserting “and not to exceed \$4,213,000 for each of
23 fiscal years 1983 and 1984,” immediately after “fiscal year
24 1982,”.



DEPARTMENT OF AGRICULTURE
OFFICE OF THE SECRETARY
WASHINGTON, D. C. 20250

July 2, 1983

Honorable Walter B. Jones
Chairman, Committee on Merchant Marine
and Fisheries
House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

This is in reply to your request of March 11, 1983, for a report on H.R. 1761, a bill "To amend Title I of the Marine Protection, Research, and Sanctuaries Act of 1972."

This Department defers to the views of the Department of Commerce, the Army Corps of Engineers, and the Environmental Protection Agency concerning this bill.

The bill would require that a process be established for designation of sites for dumping of waste material. It would establish certain criteria by which these sites would be evaluated.

The bill appears to be compatible with the Department of Agriculture (USDA) policy on land use which advocates the retention of wetlands and certain other lands unless other needs clearly override the benefits derived from retention of such lands. The proposed legislation should have minimal effects on USDA programs.

The Office of Management and Budget advises that there is no objection to the presentation of this report from the standpoint of the Administration's program.

Sincerely,

John R. Block
Secretary

Mr. D'AMOURS. I look forward to today's testimony and welcome the witnesses.

Before I recognize the witnesses, however, I will recognize the ranking full committee minority member, Mr. Forsythe.

Mr. FORSYTHE. Thank you, Mr. Chairman. I do have a short statement. I, too, look forward to today's testimony to see how far we have come in the years since we last addressed the issue contained in H.R. 1761.

It seems that many of the issues which faced us a year ago are still in existence. Specifically, we have not yet received the EPA's regulations concerning the changes necessary to meet the decision of Judge Sofaer in the *City of New York v. EPA*. We are also still faced with delays in the permanent designation of sites for disposal of dredge spoils at many major harbors in the United States. EPA has only just begun the process of designation of sites for dumping of municipal sludge in the New York Bight.

I hope today's hearings will assist in describing the relevant progress, identifying the problems, and finding solutions.

While I do not wish to interject a negative note in the beginning of a hearing of this sort, I would like to remind the witnesses that the rules of the House Merchant Marine and Fisheries Committee require testimony to be submitted 48 hours in advance. I understand this is sometimes difficult to do. However, in the case of this hearing not one witness submitted his testimony 48 hours in advance. As a matter of fact, most witnesses did not submit their testimony 24 hours in advance. This makes preparation for a hearing extremely difficult and results in inefficiency. I might further point out that in a complex area such as this, I think it is important that the staff of this committee, both majority and minority, have an opportunity to assure that the relevant questions are asked of the witnesses so that we can truly find where we are going.

Nevertheless, I welcome today's witnesses and look forward to hearing their testimony. Thank you very much, Mr. Chairman.

Mr. D'AMOURS. I thank you, Mr. Forsythe.

Does anybody else have any opening statements? Apparently not.

Mr. FORSYTHE. Mr. Chairman, since the ranking minority member of the subcommittee is not here and does have a statement, I ask unanimous consent that it be included in the record.

Mr. D'AMOURS. Without objection, it will be included at this point in the record.

[The statement to be furnished follows:]

STATEMENT OF HON. JOEL PRITCHARD, A REPRESENTATIVE IN CONGRESS FROM THE
STATE OF WASHINGTON

During the past few years, several events pertaining to ocean dumping have come to the attention of the Committee. These events led the Committee to closely examine the need for amendments to the Act during the 97th Congress. However, many of the issues remain unresolved and will be issues of concern during the 98th Congress.

This legislation that we are going to receive testimony on today attempts to address the various complex ocean dumping concerns. H.R. 1761, as introduced, provides for the following: (1) It changes the Administrator's discretionary site designation authority to a mandatory duty; (2) It requires the Administrator to develop monitoring programs, where appropriate; (3) It requires the Administrator to determine a site's suitability for further dumping; (4) It requires the Administrator to establish an explicit schedule for completing site designation studies for all histori-

cally used sites; (5) It grandfather's interim-designated sites, allowing them to be used until completion of studies; (6) It changes the discretionary provision for collecting permit processing fees to a mandatory duty; and (7) It reauthorizes Title I of the Act at the fiscal year 1982 authorization level of \$4.213 million.

The Committee will listen carefully to any suggested changes that are offered here today.

Mr. D'AMOURS. In recognizing the witnesses I would like to echo the caveat that Mr. Forsythe just issued. It is unusual that we have such poor compliance with the 48-hour rule such as we have had in this case and I would admonish the witnesses to see to it that it does not become the practice.

Also, before I recognize Mr. Eidsness from EPA, I would like to tell the witnesses that this meeting was originally scheduled to begin at 10 o'clock this morning. We have a number of witnesses and I am certain the question and answer period is going to take a considerable amount of time. So I would like to ask all the witnesses who are going to testify today to summarize as much as you possibly can the content of your testimony.

Now, the fact that we received it so late makes that request all the more difficult to make and we would be in a better position to respond to your testimony had we had it earlier. But, nonetheless, if we are going to finish this hearing within the time allotted today we are going to have to ask you to be as brief as you possibly can and summarize as much as you possibly can.

With that I will recognize—

Mr. DYSON. Mr. Chairman, may I ask a question? On the witness list I see we have two witnesses from EPA, two assistants to those two witnesses. Will we be able to question after the two witnesses from EPA before the Army Corps of Engineers comes up?

Mr. D'AMOURS. Yes, the EPA, as you notice, is grouped as a panel so the questions will be addressed to EPA and then to the Corps of Engineers and to individual witnesses who follow.

Mr. DYSON. Thank you, Mr. Chairman.

Mr. D'AMOURS. Mr. Eidsness, would you please proceed?

STATEMENTS OF FREDERIC A. EIDSNESS, JR., ASSISTANT ADMINISTRATOR FOR WATER, ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY DAVID G. DAVIS, DIRECTOR, SLUDGE TASK FORCE; TUDOR DAVIES, DIRECTOR, POLICY OFFICE OF THE OFFICE OF WATER; STEVEN SCHATZOW, DIRECTOR, OFFICE OF WATER REGULATIONS AND STANDARDS; AND PETER W. ANDERSON, CHIEF, MARINE AND WETLANDS PROTECTION BRANCH, EPA REGION 2

Mr. EIDSNESS. Good morning, Mr. Chairman and members of the subcommittee.

I am Frederic A. Eidsness, Jr., Assistant Administrator for Water in the Environmental Protection Agency. With me today on my right are Dr. Tudor Davies. Dr. Davies just joined the Office of Water as head of my policy staff. Dr. Davies was formerly the head of the EPA Research Laboratory at Narragansett where he had extensive management and technical responsibility concerning estuarian and marine pollution.

On my immediate left is Mr. Steve Schatzow, Director of the Office of Water Regulations and Standards, who is responsible for

day-to-day implementation of the Marine Protection Act and development of regulations and guidance under that act; and on my far left, Mr. Dave Davis, who will testify after I do. Mr. Davis is also on my staff. He is heading up the interagency task force on sludge management for the Agency.

If I may, Mr. Chairman, I would like to introduce into the record a longer, more expansive testimony that we have prepared and I do sincerely apologize for the lateness of our delivery and trust that it will never happen again if there is any control I have over the issue.

[The statement of Mr. Eidsness follows:]

PREPARED STATEMENT OF MR. FREDERIC A. EIDSNESS, JR., ASSISTANT ADMINISTRATOR
FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY

Good morning, Mr. Chairman and Members of the Subcommittees. I am Frederic A. Eidsness, Jr., Assistant Administrator for the Office of Water, U.S.E.P.A. With me today are Tudor Davies, Director of my Policy Office, and Steven Schatzow, Director of the Office of Water Regulations and Standards. I am pleased to be here today to present the Agency's views on the reauthorization of Title I of the Marine Protection, Research, and Sanctuaries Act, to discuss the Agency's position on H.R. 1761, a Bill to amend Title I of the MPRSA, and to update the Subcommittees on the status of the Agency's Ocean Dumping Program.

I would like to emphasize that protecting our marine resources from unreasonable degradation is one of my priority goals. I work closely with my senior staff on ocean related issues. Let me reassure the Members of this Committee that EPA will continue to work vigorously to protect and better understand the Marine environment.

REAUTHORIZATION OF THE ACT

EPA believes that the current Act provides a well thought out framework for protecting the marine environment. The present statute provides a flexible and workable approach for considering ocean disposal activities along with other waste disposal options, while at the same time protecting our marine resources from unreasonable degradation. We support reauthorization of the Act at the President's proposed funding levels and see no need to amend substantively the current statute beyond extending the reauthorization through fiscal 1985 and providing the Administrator discretion to adopt a user system for recovering the program costs of ocean disposal.

COMMENTS ON H.R. 1761

The provisions of H.R. 1761 are similar to those of H.R. 6113 which, with exception of provisions for the disposal of low-level radioactive materials, failed to be enacted in the 97th Congress. Last spring we testified regarding our concerns on that bill. Let me now review the Agency's comments as they apply to H.R. 1761. The first major provision of the bill concerns dumpsite designations. In the current Act, section 102(c) provides that the Administrator may designate ocean dumpsites pursuant to certain criteria established by the Act, including the effect of disposal on aesthetic values, marine biology, waste material characteristics and volume.

The proposed amendments change this procedure in several ways. First, where the current Act provides the Administrator with some discretion in designating dumpsites, the proposed amendments eliminate that discretion by modifying section 102(c) to read "shall designate." In addition, the Administrator is directed to designate these sites in accordance with a new set of statutory criteria. These criteria are similar to the criteria in the Agency's ocean dumping regulations and pose no problems. Other site designation provisions in the bill clarify the Administrator's dumpsite monitoring and management responsibilities.

The bill's site designation provisions, Sections 2 and 5, appear to rescind the Agency's authority to approve the use of interim sites unless those sites were approved prior to the passage of H.R. 1761. We believe that such a change is undesirable. As you know, site designation is a complex process which requires the Agency to characterize the physical, chemical, and biological aspects of the site. This involves both laboratory testing as well as resource and time intensive field surveys. These scientific analyses are essential, but the Agency should have the flexibility to

designate interim sites where there is sufficient technical information for a preliminary assessment. While it is preferable to formally designate sites, however, our experience demonstrates the need for the requested flexibility. The designation process includes gathering scientific data, making assessments of the data, and going through a rulemaking process that includes receiving and analyzing public comments, responses to those comments and a final rulemaking. The time span from the date gathering stage to final rulemaking can be significant. There are currently 127 interim designated dredged material sites that have their interim status extended if a final decision on designation has not yet taken place. We have some level of scientific information on most of these sites. We also believe that we will need to have interim designations in the future to cover such activities as one-time, short-term, research, and emergency dumping. We have found that the interim dumpsite approach is workable and recommend retaining this approach.

I would like to emphasize that we are working vigorously on site designations. About two years ago, I established a task force with additional technical staff within the Office of Water specifically devoted to reviewing scientific data and writing Environmental Impact Statements for site designations. In the last year, we have written 12 draft environmental impact statements and 6 final environmental impact statements for dredged material sites. While we have not quite met our demanding schedule, we are committed to completing these efforts as rapidly as possible.

One recent development should help to improve the quality of the environmental impact statements as well as shortening the process in their development. In February 1983, the Agency sponsored a workshop of over 30 scientific and technical experts in the field of physical, chemical, and biological oceanography. These experts included representatives from NOAA, Corps of Engineers, EPA, consulting firms, environmental groups, and academia. The purpose of this workshop was to discuss and develop a scientific protocol to assist the Agency in streamlining the site designation process and to improve the scientific basis for site designation decision making. We expect a final product from this workshop to be completed by late Spring.

We are also concerned with section 7 which provides for a writ of mandamus requiring the Administrator to designate a disposal site in a timely manner. Section 7 as now written could allow any permit applicant to force the Agency to investigate any site of his choosing irrespective of EPA's site designation priorities and the efficacy of that particular site, and would be resource intensive resulting in programmatic delays and increased expenses. Furthermore, there already exist adequate legal mechanisms for the public. Such legal actions were used by the National Wildlife Federation in bringing a law suit requiring the Agency to designate sites on a court approved schedule.

H.R. 1761 contains a very detailed section which defines monitoring, and includes a range of techniques that may be used for monitoring different sites. The language provides for flexibility and discretion in establishing the proper monitoring techniques for a particular site depending on the characteristics of the site and the type of wastes being disposed. This is consistent with the approach that the Agency currently takes in establishing different monitoring protocols for different sites and different types of wastes. However, we see no need for this level of detail to be included in the statute.

We would prefer that H.R. 1761 include a reauthorization through fiscal 1985 rather than fiscal 1984. This would provide for continuity in on-going programs.

Section 3 of H.R. 1761, which is similar to Section 104(b) of the Act, limits the Agency's authority to collect fees in administering the ocean disposal program to those funds spent in processing permits. However, the funds spent in permit processing are only a small portion of the total program costs which include such activities as site designation, site maintenance, compliance monitoring and enforcement. We would like to propose a fee collection system encompassing the Federal costs incurred in completing all of these activities.

EPA'S PROPOSAL ON REAUTHORIZATION AND USER FEES

EPA has sent the Speaker of the House a draft bill to extend Title I of the Act through 1985, at a funding level of approximately \$4 million per year, as well as a user fee proposal designed to recover the direct costs of the Federal government's ocean dumping program from the industrial and municipal users of these services. The user fee would cover the costs related to site designation, program operations, and site and compliance monitoring related to ocean dumping activities. The proposal is founded on three basic objectives: (1) the system should be administrable, avoiding burdensome requirements; (2) the system should be equitable and fairly allo-

cates costs among users; and (3) the system should be auditable so as to avoid confusion and misunderstandings. It is in this spirit that the Administration's user fee proposal was formulated. I have attached to my testimony a copy of EPA's proposal and an analysis of the statutory language. If this bill is passed, it is the intent of the Agency to implement the user fee system through regulations, providing for the broadest public participation in its development. We are eager to work with the Committee on the development of the system. We would also expect to report to the Committee on the progress of its implementation.

Let me take a few moments to highlight one possible implementation scheme to recover the costs to the Agency.

The total yearly program costs could be allocated among the permittees on the basis of tonnage of waste transported for ocean dumping. The fee might be determined in the following way: (1) existing permits would be reviewed to estimate tonnage for the following year; (2) A standard cost per ton fee would be established to recoup projected costs and charged to all applicants discharging in the following year; and (3) at the end of the year, the actual costs and tonnage would be calculated and applicants would be either reimbursed or assessed additional charges, depending on the accuracy of projected costs and tons dumped during the year. The Administrator would also have discretion to consider other factors such as the type of wastes, Agency resources expended, or special monitoring requirements to equitably allocate costs among users of these services.

This system has several positive features. Applicants will be paying the program costs for the year in which they are receiving their services from the government. Most importantly, the costs of the program are placed on those benefiting from the program, and allocated proportionately according to tonnage transported to be dumped or where appropriate, based on other equitable considerations. We urge this Bill's prompt passage.

REVISIONS TO OCEAN DUMPING REGULATIONS

I would now take a few moments to discuss the status of the Agency's ocean dumping regulations. As you are all aware, we are in the process of revising these regulations. A rulemaking package on ocean dumping is in the final stages of Agency review and should be proposed to the public in the near future. I thought it would be appropriate at this time to highlight the proposal in its current form.

On January 11, 1977, the Agency published final regulations establishing the procedures to be followed in reviewing applications for ocean dumping permits and the substantive criteria to be applied in evaluating those applications (42 FR 2462). Those regulations contain several classes of permits: 1) general, for materials which will have a minimal adverse environmental impact and are generally disposed of in small quantities; 2) special, for materials which pass all the statutory criteria; 3) interim, generally for materials which do not pass the environmental impact criteria and which may not be dumped after December 31, 1981; 4) emergency, for which there exists an emergency requiring the dumping of such materials which poses an unacceptable risk to human health and admits of no other feasible solutions; 5) research permits, for dumping as part of a research project; and 6) dredged material permits, issued by the Corps of Engineers.

The existing regulations prohibit after December 31, 1981, all dumping of wastes which cannot meet the detailed environmental impact criteria contained in Part 227. The environmental impact criteria generally are based upon laboratory bioassays to determine the toxicity of the wastes and the potential for bioaccumulation. Essentially, the regulations contain a conclusive presumption that wastes which cannot pass the environmental impact criteria would cause unreasonable degradation of the marine environment without regard to whether there are land-based alternatives to ocean dumping and whether these alternatives are environmentally inferior.

COURT CHALLENGE

After the regulations were promulgated, they were the subject of several court cases involving municipalities and environmental groups. In "City of New York V. EPA," the City of New York challenged EPA's refusal to consider its request for an extension of its interim permit beyond December 31, 1981. The court held that the Agency's conclusive presumption that materials which fail to satisfy the environmental impact criteria will unreasonably degrade the environment was arbitrary and capricious and not in accordance with the MPRSA. The judge issued a final order remanding the regulations to the Agency for revisions to eliminate the conclusive presumption.

Pending revision to the regulations, the court authorized EPA to continue to apply the regulations except insofar as they establish a conclusive presumption of unreasonable degradation to the environment based solely upon a finding that a permit applicant's waste violates the marine environmental impact criteria.

As we stated in testimony here last Spring, EPA is generally in accord with Judge Sofaer's decision and did not appeal the decision. Judge Sofaer's decision is consistent with the intent of Congress to prohibit the dumping of materials which would unreasonably degrade the marine environment. The decision only requires EPA to consider all the statutory factors set forth in Section 102(a) of the Act in determining whether ocean dumping of sewage sludge unreasonably degrades the ocean environment. Judge Sofaer's decision allows EPA to modify its regulations when necessary to take into account additional scientific information and the experience gained from administering the ocean dumping program. EPA agrees with the court that the 1977 amendments to the Act were not intended to freeze EPA's environmental criteria. A contrary interpretation of the statute would severely limit EPA's flexibility.

NEW PROPOSED RULES

EPA will soon propose revisions to the existing regulations to comply with this court order. Three additional changes also will be proposed to reflect recent statutory amendments limiting research and emergency permits to industrial wastes, establishing a six month limit on research permits, and establishing additional requirements on the disposal of low-level radioactive wastes in accordance with the 1982 amendments to the Act.

To comply with the "City of New York" decision, the proposed rules would remove the conclusive presumption that materials which fail to satisfy the environmental impact criteria will unreasonably degrade the environment. In determining whether ocean disposal will unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities, EPA will consider all the relevant statutory factors. These determinations will be made on a case-by-case basis, considering technical feasibility, environmental and human health impacts, and costs of waste disposal alternatives. In permitting decisions, the burden will be on the applicant to demonstrate to the Agency that ocean disposal will not cause unreasonable degradation.

In addition to these regulatory changes, the Agency also has established a sludge task force to develop comprehensive guidelines for municipal sludge disposal and reuse. The Office of Water has lead responsibility for this task force. I have appointed Dave Davis to head this task force. Dave will be discussing in greater detail the work of the sludge task force. Let me briefly describe this work as it relates to our ocean disposal program. The task force is examining public health and environmental impacts, the costs, and the resource and energy conservation benefits of sludge disposal or reuse in all media using all major conventional technologies or practices. These management options include landfilling, land application, distribution and marketing, incineration, and ocean disposal. Based upon an analysis of environmental need, availability, cost-effectiveness of technologies and practices, and existing Federal or State regulatory programs, the task force will fashion guidance on management approaches. The final guidance document will also contain any analytic framework for use by local officials in assessing their site specific sludge management options and fashioning an overall sludge management program. The Agency intends to use this guidance, in conjunction with the regulations, for evaluating alternate disposal methods for sewage sludge from the technical and environmental perspective. Concurrent with these activities, the Agency is studying the characteristics of disposal sites to determine the site's capacity to assimilate various types of wastes. The results of these efforts will serve as guidance for waste disposers regarding disposal alternatives.

REQUEST FOR COMMENTS

The changes that we will soon propose respond to the Court Order, and the 1977, 1980, and 1982 amendments to the MPRSA. Concurrently, the Agency has been conducting a comprehensive review of the ocean dumping regulations. If necessary, any changes that are identified would likely be proposed later this year following this review. In order to provide broad public participation in this process, EPA, as part of the regulatory package which we are about to propose, will solicit comments on several issues where changes are being considered. Let me identify those issues for you now.

DISPOSAL OF LOW-LEVEL RADIOACTIVE WASTES

Since the Committee will be holding separate hearings on the issue of the disposal of low-level radioactive wastes, I would like to briefly discuss this topic with you. There is significant public interest regarding the Agency's program for permitting the ocean disposal of low-level radioactive wastes. EPA's authority for regulating the ocean disposal of low-level radioactive wastes began with the passage of the MPRSA. In 1973, EPA issued regulations governing ocean disposal of radioactive wastes. These regulations require that all low-level radioactive wastes must be packaged in such a manner that the materials will radiodecay to environmentally innocuous levels within the life expectancy of the containers.

There is a popular misconception that the United States has had for the last ten years an official ban or moratorium on ocean disposal of radioactive wastes. Prior to the recent passage of statutory amendments last year, no ban existed except for the prohibition against ocean disposal of high-level radioactive wastes. In practice, however, radioactive waste disposers have selected alternatives to ocean disposal. As a result, EPA has received no permit applications since the passage of MPRSA in 1972 on which to make a decision for or against such disposal.

EPA has been notified by both the Department of the Navy and the Department of Energy that they are evaluating ocean disposal as an option for specific types of radioactive wastes. The Navy is evaluating alternatives for disposal of decommissioned, defueled naval submarine reactor plants. The Department of Energy is considering the option of ocean disposal of soils slightly contaminated with naturally occurring radionuclides as a result of ore processing operations under the Manhattan Project. The Agency will take no position on the merits of ocean disposal of radioactive wastes until we have received and reviewed any permit applications in accordance with the Ocean Dumping Act, and the recent amendments to the Act and EPA's ocean dumping regulations.

While the Agency will soon propose revisions to the ocean dumping regulations to implement the recent amendments to section 104 of the Act, the Agency also is reviewing the regulations to identify whether additional changes are warranted. One potential change would incorporate the International Atomic Energy Agency's (IAEA) quantitative definition for high-level radioactive wastes as adopted by the London Dumping Convention in 1978 and IAEA recommendations in disposal of low-level radioactive wastes. We will be soliciting comments on this and any other desired changes in the current regulations regarding the permitting of low-level radioactive wastes.

I am aware that there is a great amount of interest by the Subcommittee in the proceedings of the last Consultative meeting of the London Dumping Convention as it relates to the disposal of low-level radioactive wastes. Therefore, let me take a few moments to describe and clarify what occurred at that meeting.

The Seventh Consultative Meeting (LDC 7) of the Contracting Parties to the London Dumping Convention (LDC) was held in London February 14-18, 1983. The most controversial matter discussed at LDC 7 was a proposal made by the Pacific Island nations Kiribati and Nauru to amend the Annexes to prohibit the ocean dumping of all radioactive materials. A lengthy technical document was presented in support of this proposal.

Under the provisions of the LDC all dumping of high-level radioactive wastes is prohibited by Annex 1 of the LDC, and other radioactive wastes may be dumped under a Special Permit in accordance with guidelines developed by the International Atomic Energy Agency (IAEA) under Annex II of the LDC.

The principal objective of the U.S. delegation to the 7th LDC was to preserve the integrity of the Convention so that it would continue to serve as the principal international forum for protecting the quality of the marine environment. Integral to the preservation of the integrity of the Convention is assurance that policy decisions reached by the contracting parties are based on "scientific and technical information (Article 15)". In simple terms proposals to amend the annexes to the Convention, such as that proposed by Kiribati-Nauru, should be referred to the Scientific Group of the Convention and the international scientific body recognized for its expertise in the area of radioactivity and the marine environment, the International Atomic Energy Agency (IAEA).

Due to the efforts of many delegations, including the U.S. delegation, a premature decision regarding the Kiribati-Nauru proposal to ban disposal of all radioactive waste in the ocean was avoided. The island nations of Kiribati-Nauru, after considerable private discussions and negotiations with members of the U.S. delegation and others, tabled their proposal pending adequate international scientific review.

Thus, all the contracting parties agreed that before a ban or moratorium on the disposal of low-level radioactive waste should be considered by the contracting parties, a complete and impartial scientific investigation should be conducted, a report prepared, and the results analyzed by the contracting parties. Following this decision, the Spanish delegation proposed a resolution calling for a suspension on the disposal of all radioactive waste while the issue was being reviewed by the appropriate international scientific bodies. The U.S. delegation voted against this resolution. We believed that the resolution contradicted the previous decision that had just been reached. Having just concluded that adequate scientific information and appropriate investigatory procedures under the LDC were necessary to resolve the issue, the U.S. could not support a resolution which reversed that previous decision and supported an immediate moratorium.

We also noted that the U.S. Congress had recently enacted legislation requiring a moratorium for two years on the disposal of low-level radioactive waste (except for research purposes). Our support of a domestic moratorium and our opposition to an international moratorium are not inconsistent. It is entirely appropriate for the United States to adopt its own domestic policy through appropriate legislative procedures, while opposing attempts to adopt international policy through procedures which are inconsistent with both the letter and spirit of international agreements. Specifically, we could not support a resolution that may have the effect of raising doubt or question as the meaning of Annex I and II without formal rules and procedures.

We believe that it would have been extremely confusing to have, on the one hand, referred the radioactive waste issue to appropriate scientific advisory groups and at the same time to have voted for a resolution which prejudged the results of that investigation.

Let me emphasize that the LDC is a very important international agreement that goes beyond affecting the disposal of radioactive wastes. In addition, it is a critical international forum for discussing issues such as disposal of dredged material and incineration of wastes. That is why we felt it was essential to maintain the integrity of the Convention and its role in assuring a scientific basis for decision making.

Mr. Chairman, I look forward to working with you and other members of the Merchant Marine Committee in continuing dialogue and investigation regarding the impact of low level radioactive wastes on the marine environment. You have mentioned to me your desire to convene the Committee in the near future to hear from scientific experts and to build a public record on this issue. We will be very pleased to participate in such hearings and to help assure that all relevant scientific information on the impacts of low level radioactive wastes is presented to the international scientific groups that will be investigating this issue. I believe that we should develop a joint legislative and executive branch mechanism to review and analyze the scientific results in preparation for the 9th Consultative Session of the LDC, and look forward to working with you to that end.

INCINERATION AT-SEA

There is a great deal of public interest in the Agency's permitting of incineration at-sea of toxic wastes. EPA regulates incineration at-sea by its authority under the MPRSA. Incineration at-sea is a technological destruction technique and is an alternative to land-based disposal of hazardous wastes. The liquid wastes to be incinerated are carried in cargo tanks on a vessel specially designed and equipped for such operations. These vessels are certified by the International Maritime Organization and the U.S. Coast Guard to transport hazardous wastes. At a designated site in the ocean, the wastes are fed into on-board incinerators and incinerated at 1250°C or above. The results of previous burns have demonstrated the wastes were destroyed at greater than 99.9 percent (the minimum required by the LDC) and, in most cases, greater than 99.99 percent. The resulting emissions consist primarily of hydrochloric acid, carbon dioxide, carbon monoxide and water vapor.

The first incineration at-sea project conducted in the United States was conducted under a research permit issued to Shell Chemical Company of Houston, Texas, in 1974. Between October 1974, and January 1975, 8400 metric tons of organochlorine wastes from the Shell Chemical Company Deer Park Manufacturing complex were incinerated aboard an ocean incineration vessel in the Gulf of Mexico. The organochlorine wastes were liquid wastes such as chlorethanes, and chlorethanes resulting from the manufacturing of vinyl chloride. Stack emission monitoring during the burns indicated that the destruction efficiency of the wastes averaged 99.99 percent. EPA completed an Environmental Impact Statement and then designated an incin-

eration site approximately 315 kilometers south-southeast of Galveston, Texas, which is now known as the Gulf Incineration Site.

A second series of burns totalling 29,100 metric tons of mixed wastes were conducted at the site in 1974-1975 and in 1977. A third series of incineration operations followed during July and September of 1977 when the toxic herbicide, Agent Orange, was incinerated at a site 322 kilometers west of Johnston Atoll in the Pacific Ocean.

In 1981 and 1982, liquid PCB wastes were incinerated under a research permit at the Gulf Incineration Site. Before and during the second PCB burn, the Agency used its ocean survey vessel, OSV ANTELOPE, to undertake a marine and air monitoring program to gather site specific data on the potential environmental impacts of the burn. The Agency is currently evaluating the data to determine combustion and destruction efficiencies and to assess any impacts at the site, in the air, or water, as a result of the incineration operations.

The Agency completed an Environmental Impact Statement and in November 1982, proposed the designation of the North Atlantic Incineration Site centered 266 kilometers east from Delaware Bay, and 294 kilometers, east-southeast of Ambrose Light (entrance to New York Harbor), and covering 4250 km² on the Continental rise. We are planning to conduct a hearing on this proposal to solicit further public comment.

One of the major issues of concern to the Agency and the public for any incineration activity is how to deal with complex mixtures of chemical wastes. By their nature, liquid hazardous wastes are mixtures that are not pure but rather come from a variety of waste sources. For example, in the recent PCB burns, while the wastes contain significant quantities of PCB contaminated oils, there were also other contaminants such as trichlorobenzene, and other organic compounds. In addition, the concentrations of these waste compounds change from batch to batch. To provide proper accountability of these wastes to be incinerated is not only of great concern to the ocean incineration program but also to the land-based incineration program administered under the Resource Conservation and Recovery Act (RCRA). To handle these wastes through the permitting process, we are looking toward new concepts that although never applied to incineration at sea, have been used in the land-based incineration program under RCRA. The new concepts create a ranking system for compounds based on an index of incinerability and a surrogate testing scheme based on a principal organic hazardous constituent (POHC) system. The index of incinerability is a scientifically valid ranking order where individual chemical compounds are listed based upon their ease of incineration. For example, the most difficult compound to thermally destroy is listed first and the least difficult compound is listed last. In total, there are 292 compounds ranked on this index.

This index serves as a guide to select principal organic hazardous constituents from a complex waste mixture to serve as surrogate for determining the incinerability of the overall waste mixture. This surrogate testing system first appeared in rulemaking under RCRA: Incinerator Standards for Owners and Operators of Hazardous Waste Management Facilities—Interim Final Rule Parts 264 and 122, 46 FR 7666, January 23, 1981. The surrogate system has been validated through laboratory and field studies and has been specified in two recent permits issued under RCRA for land-based incinerator facilities which deal with complex waste mixtures.

The Agency intends to apply these concepts to control the incineration of mixed chemical wastes and determine which wastes can be incinerated. When a new incinerator vessel is placed in service, its incinerator system must undergo an evaluation to qualify it for incineration of chemical wastes. By conducting a trial burn which can be accomplished through a research permit, operation parameters are evaluated, and thermal destruction efficiencies are monitored based on the principal organic hazardous constituent system. For ocean incineration, we are considering establishing required destruction efficiencies more stringent than the minimum requirements of the London Dumping Convention of 99.9 percent. If proper destruction efficiencies are achieved, only those compounds which are easier to burn than the most difficult principal organic hazardous constituent tested would be allowed to be incinerated on that vessel. At that time, an operational (special) permit could be considered. A special permit is for three years. As under RCRA, the Agency would require an analysis of the wastes before they are loaded on the ship. If the waste contains compounds more difficult to thermally destroy than evaluated in the trial burn, these wastes would not be allowed to be incinerated under the operational permit. In order to burn such wastes, the permittee would have to perform a new trial burn to demonstrate that the vessel's incinerator has the capability to successfully destroy these wastes to prescribed destruction efficiencies. Under all burns, incineration operational parameters such as carbon dioxide, carbon monoxide, air feed rate

and temperature must be strictly monitored and reported. The operational parameters ensure that proper incinerator combustion is being attained and that the wastes are properly being thermally destroyed. This procedure is similar to the RCRA requirements for evaluating and monitoring land-based incinerator facilities.

In addition, there are certain wastes identified under the London Dumping Convention for which doubts on their thermal destruction efficiency exist. These wastes are polychlorinated biphenyls (PCB's), polychlorinated triphenyls (PCT's), tetrachlorodibenzo-p-dioxin (TCDD or commonly known as dioxin), benzene hexachloride (BHC or commonly known as lindane), and dichlorodiphenyl trichlorethane (DDT). Wastes containing these materials would require a trial burn to evaluate the vessels incinerator's ability to thermally destroy these wastes at a prescribed destruction efficiency. The Agency plans to apply this procedure for each incinerator vessel for each of these five compounds.

At such time when substantial scientific data are available from prior trial burns on these five compounds and/or from other independent research showing a strong correlation between waste combustion efficiency, destruction efficiency and incinerator operational parameters, EPA will then make a determination if there is no longer doubts as to thermal destructibility of these wastes. If the wastes are considered to be thermally destroyed and no doubt exists regarding their thermal destruction efficiencies, then these wastes will be handled similar to other organic hazardous wastes using the index of incinerability and the principal organic hazardous constituent testing scheme.

Currently, the Agency is thoroughly analyzing the ocean incineration program and evaluating the technical requirements of the London Dumping Convention to ensure that at-sea incineration provides adequate protection to the public health and environment. Following this analysis, the Agency may incorporate additional requirements into the Ocean Dumping Regulations rather than the current process of establishing ad hoc technical controls and monitoring requirements through the permit process. In our proposal, the Agency will solicit comments on its approach for permitting incineration at-sea activities and on any additional changes or requirements that should be included in revised ocean dumping regulations.

DREDGED MATERIAL

The Agency is considering whether regulatory changes should be made regarding ocean disposal of dredged material. One issue is whether dredged material should be treated differently from non-dredged material. In the *National Wildlife Federation v. Costle* case, National Wildlife Federation (NWF) challenged the existing regulations, arguing that EPA was not permitted to establish different, and generally less stringent, regulations for dredged materials. The Court of Appeals held that EPA's justification for treating dredged materials and non-dredged materials differently was inadequately explained. The District Court subsequently remanded the regulations to EPA for revisions. EPA is currently assessing what changes are needed. During the rulemaking process we will solicit comments on whether the environmental criteria and site designation procedures for dredged material should be the same as for other materials.

GENERAL PERMITS

EPA is considering whether to expand the provisions for general permits to allow the disposal of non-salvageable and non-recycleable metals, structures, or parts of structures. This provision would allow the ocean disposal of parts of drilling platforms or structures in situations when removal to shore is not feasible. An additional general permit is being considered for the disposal of solid wastes from Antarctica by the National Science Foundation (NSF). The U.S. Antarctic program is an expeditionary program of scientific research on the continent of Antarctica and aboard ships in the oceans of the region (South of 60° South latitude). Most of the solid wastes generated as a consequence of the U.S. Antarctic program are disposed of in landfills or in ice holes on the continent of Antarctica. However, at certain stations or field locations or at certain times of the year, these methods of solid wastes disposal are impractical. Therefore, NSF has requested a general permit for ocean disposal of limited quantities of solid wastes, including kitchen wastes, crushed glass containers and waste metals from shops and laboratories. The Agency will request public comment on whether these general permits should be added to the regulations.

REGULATORY REFORM

Consistent with the President's regulatory reform initiative, we are examining the regulations to determine ways to simplify and streamline them. We will ask the public to identify parts of the regulations that are ambiguous, difficult to apply, or that may result in excessive delays, regulatory burdens, or costs. We will also request suggestions on improvements to the regulations.

Let me emphasize that EPA will take into consideration the comments received as a result of this request. Should EPA propose additional revisions to the ocean dumping regulations, the agency will also provide an opportunity for public comment on the proposed changes to the regulation.

STATUS OF THE 12/60/106 MILE SITE DESIGNATIONS

I understand that there will be subsequent hearings on the disposal of sewage sludge in the New York Bight, but I would like to briefly update the Committee concerning the status of this activity. As you know, New York City and six (6) New Jersey sewerage authorities have petitioned EPA to redesignate the 12-Mile Sewage Dump Site in the New York Bight Apex. On December 9, 1982, EPA (Region II) notified the petitioners that insufficient information has been submitted to support redesignating the site. Additional information was requested to be supplied by May 2, 1983 to support the contentions raised in the petitions and to address EPA's site designation criteria (40 CFR Part 228). On December 20, 1982, EPA solicited public comments on the petitioners' request for rulemaking to amend 40 CFR § 228.12(B)(4) to redesignate the 12-Mile Site. Eleven communities continue to ocean dump their wastes under temporary authority pending action by the Agency.

During 1982, 7,632,000 wet tons of municipal sewage sludge were dumped at the 12-Mile Site. The net increase of approximately 1,000,000 wet tons dumped over the amount dumped in 1981 (6,682,000) is because the Passaic Valley treatment plant was upgraded from primary to secondary.

This notice also solicited public comments on the possible redesignation of an enlarged Alternate Sewage Sludge Dump Site (the 60-Mile Site) in the Bight. The 60-Mile Site was considered for possible redesignation since it has been previously linked (i. e., designated for use only if an emergency situation arose at the 12-Mile Site) with the 12-Mile Site.

On December 20, 1982, EPA also announced, in a separate Federal Register notice, the proposed final site designation for the interim designated industrial waste dump site (the 106-Mile Ocean Waste Dump Site) for the disposal of aqueous industrial wastes (no time restriction) and municipal sewage sludge (5 year time limit).

Comments on these two notices have been received from 19 governmental entities, 15 environmental groups, one industrial group, and the general public (32 commentors). An interagency work group is being formed to review the comments, and we expect to reach a decision on the 106-Mile Site designation within the next three (3) months. The task force will also review the public comments and all information supplied by the petitioners (which is due on May 2, 1983) concerning EPA's decisions on the possible redesignation of the 12- and 60-Mile Sites. The decision(s) will be published in the Federal Register. It should be noted that even if a site is designated, the use of a site for dumping must still be authorized by a permit pursuant to Sections 102 and 103 of the Ocean Dumping Act.

EPA'S RESEARCH ACTIVITIES

An essential element of EPA's marine activities is our research to understand better the marine ecosystem and the impact of man's activities on this valuable resource. Therefore, I would like to highlight for the Subcommittees some of EPA's ongoing and planned research activities which pertain to ocean pollution problems. EPA's ocean disposal research activities address problems relating to ocean dumping and ocean outfalls. This work is done both at EPA laboratories and extramurally.

The organizing rationale of the research program is the hazard assessment concept. Specifically, the probability that hazardous conditions may prevail in the environment is evaluated by comparing the relationship between the expected ambient concentration of waste components and the threshold concentration for specific toxicological effects. Normally, hazard assessment studies are conducted in a sequential manner, beginning with a preliminary assessment to define the problem, then moving to more extensive studies to provide more detailed fate and effects informa-

tion. The major components of this effort include waste characterization, dumpsite selection, effects assessment, exposure assessment and dumpsite monitoring.

The first step in a hazard assessment scheme is the development of protocols for waste characterization utilizing physical, biological and chemical screening procedures. The effects assessment portion will define the possible ecological impacts of ocean dumping through measurement of biological responses to the ocean dumped waste. The exposure assessment portion predicts the environmental distribution and fate of pollutants by determining not only where a pollutant may go in the environment (i.e., sediment, water, or organisms) but at what levels it can be found.

Effective management of dumpsites requires monitoring to assure that any impacts resulting from ocean dumping activities do not become unacceptable. And also to provide a basis for hypothesis development and testing of the hazard evaluation framework previously described.

EPA has entered into collaborative research agreements on ocean dumping and marine research with NOAA and the U.S. Army Corps of Engineers. In recognition of the different types of expertise, the three agencies are attempting to gain optimal use of resources. This cooperative program focuses on the development of methods and protocols for marine hazard assessment of waste disposal. Field studies are being conducted to analyze active waste and dredged material disposal sites in the New York Bight and Long Island Sound. These studies will improve our skills to assess marine pollution, from the initial characterization of wastes to predictive testing and modeling procedures, and short and long-term monitoring approaches.

That concludes my prepared remarks. I would be pleased to take questions.

A BILL

TO AMEND AND EXTEND TITLE I OF THE MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT, AS AMENDED, FOR TWO YEARS.

BE IT ENACTED BY THE SENATE AND THE HOUSE OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA IN CONGRESS ASSEMBLED, THAT

SECTION 1. SECTION 111 OF THE MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT, AS AMENDED (33 U.S.C. 1420), AMENDED BY STRIKING "AND" IMMEDIATELY FOLLOWING "1981," AND INSERTING "AND NOT TO EXCEED \$3,996,400 FOR FISCAL YEAR 1984, AND SUCH SUMS AS MAY BE NECESSARY FOR FISCAL YEAR 1985," IMMEDIATELY FOLLOWING "1982,".

SECTION 2. SECTION 104(B) OF THE MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT, AS AMENDED (33 U.S.C. 1414), AMENDED BY INSERTING "(1)" IMMEDIATELY FOLLOWING "(B)" ADDING AT THE END THEREOF THE FOLLOWING:

"(B)(2)(A) AS A CONDITION OF ISSUING AND MAINTAINING A PERMIT UNDER SECTIONS 102 AND 103, THE ADMINISTRATOR OR THE SECRETARY, AS THE CASE MAY BE, MAY PRESCRIBE AND COLLECT AN ADDITIONAL FEE TO RECOVER THE COSTS INCURRED OR EXPECTED TO BE INCURRED FOR SITE DESIGNATION, PROGRAM OPERATIONS, AND SITE AND COMPLIANCE MONITORING. THE FEE MAY BE BASED UPON TONNAGE TRANSPORTED TO BE DUMPED OR ANY OTHER FACTORS THAT THE ADMINISTRATOR OR SECRETARY DEEM APPROPRIATE. THIS FEE SHALL NOT BE APPLICABLE TO OTHER FEDERAL AGENCIES. THE FEE CHARGED TO NON-FEDERAL ENTITIES FOR THE DISPOSAL OF DREDGED MATERIAL SHALL REPRESENT THE SHARE OF THE COSTS OF THE TOTAL DREDGED MATERIAL PROGRAM WHICH THE SECRETARY DETERMINES TO BE ATTRIBUTABLE TO SUCH NON-FEDERAL ENTITIES.

(2)(B) THE ADMINISTRATOR OR SECRETARY, AS THE CASE MAY BE, MAY PRESCRIBE SUCH REPORTING REQUIREMENTS AS HE OR SHE DEEMS APPROPRIATE WITH REGARD TO ACTIONS TAKEN BY PERMITTEES PURSUANT TO PERMITS ISSUED UNDER THIS TITLE."

SECTION-BY-SECTION ANALYSIS

SECTION 104(b), (2), AND (3) IS ADDED TO SECTION 104(b), WHICH AUTHORIZES THE ADMINISTRATOR OR THE SECRETARY, AS THE CASE MAY BE, TO PRESCRIBE FEES AND REPORTING REQUIREMENTS.

SECTION 104(b)(2)(A) - AUTHORIZES THE PERMITTING AUTHORITY TO ESTABLISH AND COLLECT A FEE TO RECOVER THE COSTS INCURRED OR EXPECTED TO BE INCURRED FOR SITE DESIGNATION, PROGRAM OPERATIONS, AND SITE AND COMPLIANCE MONITORING RELATED TO OCEAN DUMPING ACTIVITIES. RECOVERABLE COSTS WOULD INCLUDE, AMONG OTHER THINGS, PERSONNEL EXPENSES, THE COSTS OF WORK DONE UNDER CONTRACT FOR THE PERMITTING AUTHORITY, AND ANY TESTING COSTS. THE PERMITTING AUTHORITY IS GRANTED DISCRETION IN THE MANNER IN WHICH THE FEE SYSTEM OPERATES. THE TOTAL YEARLY PROGRAM COSTS COULD BE ALLOCATED AMONG THE PERMITTEES BASED ON FACTORS SUCH AS TYPE OF WASTE, OR SPECIAL MONITORING REQUIREMENTS TO EQUITABLY ALLOCATE COSTS AMONG USERS OF THESE SERVICES. THE FEES MAY BE COLLECTED AT THE BEGINNING OF THE FISCAL YEAR FROM THOSE REQUESTING OCEAN DISPOSAL AUTHORIZATION FOR THE YEAR, PRIOR TO THE ACTUAL WASTE DISPOSAL, OR IN ANY OTHER REASONABLE MANNER TO PROVIDE ADEQUATE FUNDING FOR ONGOING ACTIVITIES DURING THE FISCAL YEAR. CONSISTENT WITH SECTION 104(b)(1), THIS SPECIAL FEE IS WAIVED FOR OTHER FEDERAL AGENCIES. NON-FEDERAL ENTITIES DUMPING DREDGED MATERIAL WOULD BE CHARGED ON THE BASIS OF THEIR SHARE OF THE TOTAL COSTS OF THE DREDGED MATERIAL PROGRAM ATTRIBUTABLE TO SUCH NON-FEDERAL ENTITIES.

SECTION 104(b)(2)(B) - PROVIDES THE PERMITTING AUTHORITY DISCRETION IN ESTABLISHING SUCH REPORTING REQUIREMENTS THAT ARE NEEDED FOR THE ADMINISTRATION OF THE OCEAN DUMPING PROGRAM.

Mr. EIDSNESS. I am pleased to be here with you today to present the Agency's views on reauthorization of title I of the Marine Protection, Research and Sanctuaries Act; and to update the members on the status of the Agency's ocean dumping program.

I intend to further shorten the abbreviated version of my testimony that I have before me now from which I will be reading.

I would like to emphasize that protecting our marine resources from unreasonable degradation is one of my priority goals. I work closely with my senior staff on ocean-related issues.

Let me reassure the members of this committee that EPA will continue to work vigorously to protect and better understand the marine environment.

I would like to state anecdotally as well that the former Administrator Anne Burford approved the reorganization proposal which I will now discuss and negotiate with the unions before her departure which, among other things, would establish a Marine Division. This Division would be in the Office of Water Enforcement and Permits and would consolidate the heretofore disaggregated resources of the Agency's current administration of marine-related program activities under one senior executive service manager which I think over time will improve EPA's responsiveness in meeting its various charges under both the Clean Water Act and the Marine Protection Act as it relates to the marine environment.

Reauthorization of the act: EPA believes that the act provides a well thought out framework for protecting the marine environment. The present statute provides a flexible and workable approach for considering ocean disposal activities along with other waste disposal options, while at the same time protecting our marine resources from unreasonable degradation.

We support reauthorization of the act at the proposed funding levels and see no need to substantively amend the current statute beyond extending the reauthorization through fiscal year 1985 and adopting a user fee system to recover the program costs for ocean disposal, which I will be discussing with you in a few moments.

The pending House bill, H.R. 1761, would make extensive changes to the act. The provisions of H.R. 1761 are similar to those of H.R. 6113 which, with exception of provisions for the disposal of low-level radioactive materials, failed to be enacted by the 97th Congress.

Last spring we testified regarding our concerns on that bill and most of our comments apply to H.R. 1761. However, in the interest of time, EPA's comments are related in detail in my written statement.

Last week EPA sent to the Speaker of the House a draft bill to extend title I of the act through 1985, at a funding level of approximately \$4 million per year. Our proposal includes a user fee provision designed to recover the direct costs of the Federal Government's ocean dumping program from the industrial and municipal users of these services.

The user fee would cover the costs related to site designation, program operations, and site and compliance monitoring related to ocean dumping activities.

The proposal is founded on three basic objectives: No. 1, the system should be administrable; No. 2, the system should be equita-

ble and fairly allocates costs among users and; No. 3, the system should be auditable so as to avoid confusion and misunderstandings.

It is in this spirit that the administration's user fee proposal was formulated.

I have included with my written testimony a copy of the proposal and the statutory language. If this bill is passed, it is the intent of the Agency to implement the user fee system through regulations, providing for broad public participation in their development.

We are eager to work with the committee on the development of the system, and expect to report to the committee on the progress of its implementation.

I would now like to take a few minutes to discuss the status of the Agency's ocean dumping program. As you are aware, we are in the process of revising these regulations. A rulemaking package on ocean dumping is in the final stages of Agency review and should be proposed to the public in the near future.

I would like to take this time to highlight the proposal in its current form.

The existing regulations prohibit after December 31, 1981 all dumping of waste which cannot meet the detailed Environmental Impact criteria contained in part 227. The environmental impact criteria are generally based upon laboratory bioassays to determine the toxicity of the waste and the potential for bioaccumulation.

Essentially the regulations contain a conclusive presumption that waste which cannot pass the environmental impact criteria would cause unreasonable degradation of the marine environment without regard to whether there are land-based alternatives to ocean dumping and whether the alternatives where they exist are environmentally interior to ocean disposal.

After promulgation, the regulations were the subject of several court challenges by municipalities and environmental groups. In *City of New York v. EPA*, the City of New York challenged EPA's refusal to consider its request for an extension of its interim permit beyond December 31, 1981.

The court held that the Agency's conclusive presumption that materials which fail to satisfy the environmental impact criteria will unreasonably degrade the environment was arbitrary and capricious.

The final order remanded the regulations to the Agency for revisions to eliminate the conclusive presumption.

Pending revision to the regulations, the court authorized EPA to continue to apply the regulations except insofar as they establish a conclusive presumption of unreasonable degradation to the environment based solely upon a finding that a permit applicant's sludge violates the environmental impact criteria.

As we stated in testimony here last spring, EPA is generally in accord with Judge Sofaer's decision and, therefore, did not appeal. Judge Sofaer's decision is consistent with the intent of Congress to prohibit the dumping of materials which would unreasonably degrade the marine environment.

The decision only requires EPA to consider all the statutory factors set forth in section 102(a) of the act in determining whether

ocean dumping of sewage sludge unreasonably degrades the ocean environment.

Judge Sofaer's decision allows EPA to modify its regulations when necessary to take into account additional scientific information and the experience gained from administering the ocean dumping program.

EPA agrees with the court that the 1977 amendments to the act were not intended to freeze EPA's environmental criteria. A contrary interpretation of the statute would severely limit the Agency's flexibility.

EPA will soon propose revisions to the existing regulations to comply with this court order. Three additional changes will also be proposed to reflect statutory amendments which limit research and emergency permits to industrial wastes; establish a 6-month limit on research permits; and specify additional requirements for disposal of low-level radioactive wastes.

To comply with the court order, the proposed rules will eliminate the conclusive presumption that materials which fail to satisfy the environmental impact criteria will unreasonably degrade the environment.

In determining whether ocean disposal will unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities, EPA will consider all the relevant statutory factors.

These determinations will be made on a case-by-case basis, considering technical feasibility, environmental and human health impacts, and costs of waste disposal alternatives.

In permitting decisions, the burden will be on the applicant to demonstrate to the Agency that ocean disposal will not cause unreasonable degradation.

In addition to these regulatory changes, the Agency has established a sludge task force to develop comprehensive guidelines for municipal sludge disposal and reuse.

The Office of Water has lead responsibility for this task force. I have appointed Dave Davis to head the task force. Dave will be discussing in greater detail the work of this task force.

The changes that we will soon propose respond to the court order and the 1977, 1980, and 1982 amendments to title I of the act. Our proposal will inform the public of the resultant regulatory changes.

Concurrently, the Agency has been conducting a comprehensive review of the ocean dumping regulations. If necessary, any changes that are identified would likely be proposed later this year following this review.

In order to provide early inclusion of the public and interested groups in this process, EPA will solicit comments on several issues where changes in the proposed regulation are being considered.

We are currently examining several areas and considering changes in our rules governing disposal of low-level radioactive wastes; disposal of dredged material; incineration-at-sea of toxic wastes; and general permits to allow disposal of nonsalvageable and nonrecycleable metals, structures or parts of structures, when removal to shore is not feasible.

In addition, consistent with the President's regulatory reform initiative, we are scrutinizing ways to simplify, streamline, and

reduce burdensome requirements where this can be done without loss of environmental protection.

These issues are discussed in greater detail in my written statement.

An essential element of EPA's marine activities is our research to develop a understanding of the marine ecosystem and the impact of man's activities on this valuable resource.

One of the most important challenges of my research program is how to tie evolving scientific data and new technological developments into actual day-to-day program operation.

EPA has entered into collaborative research agreements on ocean dumping and marine research with NOAA and the U.S. Army Corps of Engineers.

In recognition of the different types of expertise, the three agencies are attempting to optimize use of our collective resources. This cooperative program focuses on the development of methods and protocols for marine hazard assessment of waste disposal.

Field studies are being conducted to analyze active waste and dredged material disposal sites in the New York Bight and Long Island Sound. These studies will improve our skills to assess marine pollution, from the initial characterization of wastes to predictive testing and modeling procedures, and short- and long-term monitoring approaches.

In addition, on the programmatic side we are working vigorously on site designation. In the last year we have written 12 draft environmental impact statements and 6 final environmental impact statements for dredged material.

While we have not quite met our schedule, we are committed to completing these efforts as rapidly as possible.

One recent development should help to improve the quality of the environmental impact statements as well as shortening the process in their development.

In February 1983, the Agency sponsored a workshop of over 30 scientific and technical experts in the field of physical, chemical, and biological oceanography. These experts included representatives from NOAA, Corps of Engineers, EPA, consulting firms, environmental groups, and academia.

The purpose of this workshop was to discuss and develop a scientific protocol to assist the Agency in streamlining the site designation decisionmaking. We expect a final product from this workshop to be completed by late spring.

This concludes my prepared remarks. As I mentioned earlier, in the interests of time, my oral statement is brief. I would be happy to take questions or expand on these subjects for the members.

I also might suggest, Mr. Chairman, that at your pleasure, of course, we might let Mr. Dave Davis go next so that he can cover the sludge management aspects and then ask questions of all of us or if you prefer to ask questions of me now, that is fine.

Mr. D'Amours. The Chair had intended to recognize Dave Davis for his short statement. You can proceed, Mr. Davis.

STATEMENT OF DAVID G. DAVIS

Mr. DAVIS. Thank you, Mr. Chairman. Good morning. I am David G. Davis, Director of the EPA sludge task force.

My remarks this morning are designed to supplement those of Mr. Eidsness with regard to EPA's current efforts to develop comprehensive policy and guidelines for the disposal and reuse of municipal sewage sludge.

As you have suggested, I have also shortened my remarks.

As you are aware, sewage sludge represents a major, and growing, waste management problem in this country. Through our largely successful efforts to provide wastewater treatment throughout the Nation, we are now reaping a secondary product of that success in the form of over 6 million dry metric tons of sludge each year which must be disposed of or reused in an environmentally acceptable manner.

EPA began early to respond to the problems in a variety of ways. Media-specific regulations have been published covering such activities as sludge incineration, land disposal, ocean dumping, and the pretreatment of industrial waste discharges into municipal sewerage systems.

The Agency has sponsored a great deal of research into sludge-related matters as well.

Agency management recognized, however, that these individual, frequently media-specific, responses were inadequate by themselves in dealing effectively with a pollution problem which cut across all media—air, land, and water.

Moreover, sewage sludge has been recognized for decades as a valuable resource because of its fertilizer, soil conditioning, and water value, though this resource value must at times be balanced against our increasing concerns for heavy metals and other contaminants in sludges, including toxic organic compounds which recent EPA studies have shown to be sometimes present in sludges in significant amounts.

In response to these issues and the frequently voiced need to provide better guidance to local officials and managers of wastewater treatment programs, EPA management initiated in early 1982 a comprehensive sludge management project aimed at resolving the real or perceived problems of regulatory consistency and providing clear guidance for commonly used disposal and reuse practices.

The work was assigned to a staff task force under the general supervision of a policy committee comprised of the Assistant Administrator for Water, the Assistant Administrator for Solid Waste and Emergency Response, and the Associate Administrator for Policy and Resource Management.

All EPA offices with significant sludge-related responsibilities are represented on the task force which also has available to it extramural funds for contractor support.

The task force has actively solicited and currently receives support and assistance from a variety of groups external to EPA.

These groups include such key Federal agencies as the Department of Agriculture, the Food and Drug Administration, State governments, citizens groups, and the Association of Metropolitan Sewerage Agencies.

Through workshops, conferences, and trade or professional association conventions, the task force is tapping the interests and expertise of essentially all sectors of the sludge management community.

The fundamental charge to the task force is the development, by the end of this fiscal year, of comprehensive guidelines for sewage sludge disposal; that is, disposal on or in land, incineration, and discharge into the ocean.

The guidelines will embody explicit policy objectives formulated as part of this effort and they will complement existing EPA regulations and technical guidance pertinent to sludge management.

The guidelines which are expected to be advisory rather than regulatory in nature, will include: (1) general and technical background information; (2) recommended practices and criteria for assuring environmental protection; (3) guidance for maximizing beneficial uses and cost effectiveness, and; (4) a general analytic framework for assisting local officials in assessing their disposal and reuse options in light of local environmental, economic, and sociopolitical conditions.

As an adjunct to this external document, the task force will also provide to the policy committee recommendations for regulation revisions, research and development, and institutional mechanisms for continued Agency activities in sludge management.

The work of the task force is structured around a comparative assessment of environmental impacts, costs, and beneficial uses for the various disposal and reuse options.

We will identify major contaminants or sludge properties to serve as indicators of environmental concern for purposes of the analysis since most sludges are so complex and variable that consideration of all possible contaminants would be infeasible in attempting to fashion national policy.

To a substantial degree we are relying upon existing health and environmental effects, technology, and cost information.

However, we are attempting to array this large body of information in novel ways which will facilitate the comparison of similar classes of environmental impacts across media and, hence, provide a new and much clearer perspective for policymakers comparing, for example, the incineration and the landfilling of a particular sludge.

One of the tools we are employing for this purpose is a modeling system which permits the tracing of various impacts and costs through any postulated set of hypothetical disposal alternatives.

This method allows us to vary at will such parameters as sludge volume and composition, local air quality, local soil characteristics, and local transportation costs.

In this way, we can gain insights into the relative advantages and problems of alternative disposal practices and test the effects of varying management approaches in reducing pollution potential.

We have also recognized, as have many others, that sludge management involves many different kinds of effects and risks. Frequently, policy formulation is confounded by the inability to segregate out these different effects and risks so that truly meaningful comparisons can be made.

Using the concepts of risk segregation—such as separating long-term from short-term effects—and risk referents—such as comparing toxic contaminant effects with better known daily risks like automobile accidents—we hope to eliminate some of these “apples and oranges” problems, thus highlighting real differences and real opportunities for management solutions.

The overall effort involves a variety of both in-house and contractor tasks encompassing such areas as evaluating the many and varied current Federal and State regulatory programs, evaluating alternative institutional structures, developing cost estimating models, and assessing the current technical state of sludge sampling and analysis.

We are now well into the central analytic phase of the project with a target date of August for release of a draft of the guidelines for public review.

While it is too early to predict the policy related outcome of this effort, we have already gained important new insights into such areas as the manner in which States currently regulate sludge disposal and the trends in the use of various disposal practices reflecting changing scientific knowledge, economics, and public concerns.

In underscoring the importance of this effort, I believe that I need only reemphasize Mr. Eidsness' points with regard to its relationship to other EPA policies and programs.

Sludge management is closely tied to major pollution control programs in all media, but in particular, the formulation of sludge management policy substantially overlaps policy formulation in the areas of ocean disposal, pretreatment, and construction grants for publicly owned treatment works.

In closing, I would like to emphasize what I believe are the key characteristics of this effort which distinguish it from previous EPA activities in the area of sludge management.

First, we are examining the problem in a multimedia context, recognizing that the solution of an environmental problem in one medium may in fact create or exacerbate a problem in another.

Second, we will present an analytic approach which will assist local officials—and the public—in assessing their sludge management problem under their local conditions.

Third, we will include in our guidelines information and suggestions for addressing not only environmental impacts, but also economic impacts and beneficial uses.

Fourth, we will be filling certain gaps in the existing regulatory framework and supplementing existing regulatory provisions.

While this effort will certainly not solve all the problems of sludge management, we are convinced that it will move us far in the direction of sound environmental policy in this area, and I am pleased to have had the opportunity to present our work to this committee.

That concludes my prepared remarks. I will be pleased to answer any questions you may have.

[The statement of Mr. Davis follows:]

PREPARED STATEMENT OF DAVID G. DAVIS, DIRECTOR, SLUDGE TASK FORCE, U.S.
ENVIRONMENTAL PROTECTION AGENCY

Good Morning. I am David G. Davis, Director of the EPA Sludge Task Force. I was appointed to this position in July 1982, and I have been a career EPA employee since 1974. My remarks this morning are designed to supplement those of Mr. Eidsness with regard to EPA's current efforts to develop a comprehensive policy and guidelines for the disposal and reuse of municipal sewage sludge.

As you are aware, sewage sludge represents a major, and growing, waste management problem in this country. Through our largely successful efforts to provide wastewater treatment throughout the nation, we are now reaping a secondary product of that success in the form of over 6 million dry metric tons of sludge each year which must be disposed of or reused in an environmentally—acceptable manner. For perspective, I might note that this is in contrast to 16 million and 5 million dry metric tons per year for industrial wastewater and drinking water treatment sludges, respectively. EPA has long recognized this problem, including the relationship between its solution and the continued success of the overall wastewater treatment program.

EPA began early to respond to the problems in a variety of ways. Media-specific regulations have been published covering such activities as sludge incineration, land disposal, ocean dumping, and the pretreatment of industrial waste discharges into municipal sewerage systems. The Agency has sponsored a great deal of research into sludge-related matters.

Major topics include new or improved sludge processing and disposal technologies and the public health and environmental effects of those contaminants which may be found in sludge. Agency management recognized, however, that these individual, frequently media-specific, responses were inadequate by themselves in dealing effectively with a pollution problem which cut across all media—air, land, and water. Moreover, sewage sludge has been recognized for decades as a valuable resource because of its fertilizer, soil conditioning and water value, though this resource value must at times be balanced against our increasing concerns for heavy metals and other contaminants in sludges, including toxic organic compounds which recent EPA studies have shown to be sometimes present in sludges in significant amounts.

In response to these issues and the frequently-voiced need to provide better guidance to local officials and managers of wastewater treatment programs, EPA management initiated in early 1982 a comprehensive sludge management project aimed at resolving the real of perceived problems of regulatory consistency and providing clear guidance for commonly used disposal and reuse practices. The work was assigned to a staff task force under the general supervision of a Policy Committee comprised of the Assistant Administrator for Water, the Assistant Administrator for Solid Waste and Emergency Response, and the Associate Administrator for Policy and Resource Management.

All EPA offices with significant sludge-related responsibilities are represented on the task force which also has available to it extramural funds for contractor support. The task force has actively solicited and currently receives support and assistance from a variety of groups external to EPA. These groups include such key federal agencies as the Department of Agriculture and The Food and Drug Administration, state governments, citizens groups, and the Association of Metropolitan Sewerage Agencies. Through workshops, conferences, and trade or professional association conventions, the task force is tapping the interests and expertise of essentially all sectors of the sludge management community.

The fundamental charge to the task force is the development, by the end of this fiscal year, of comprehensive guidelines for sewage sludge disposal; that is, disposal on or in land, incineration, and discharge into the ocean. The guidelines will embody explicit policy objectives formulated as part of this effort and they will complement existing EPA regulations and technical guidance pertinent to sludge management. The guidance document, which is expected to be advisory rather than regulatory in nature, will include: (1) general and technical background information, (2) recommended practices and criteria for assuring environmental protection, (3) guidance for maximizing beneficial uses and cost effectiveness, and (4) a general analytic framework for assisting local officials in assessing their disposal and reuse options in light of local environmental, economic, and socio-political conditions.

As an adjunct to this external document, the task force will also provide to the Policy Committee recommendations for needed regulation revisions, research and development, and institutional mechanisms for continued Agency activities in sludge management.

— The work of the task force is structured around a comparative assessment of environmental impacts, costs, and beneficial uses for the various disposal and reuse options. We will identify major contaminants or sludge properties to serve as indicators of environmental concern for purposes of the analysis since most sludges are so complex and variable that consideration of all possible contaminants would be infeasible in attempting to fashion national policy. To a substantial degree we are relying upon existing health and environmental effects, technology, and cost information. However, we are attempting to array this large body of information in novel ways which will facilitate the comparison of similar classes of environmental impacts across media, and, hence, provide a new and much clearer perspective for policy makers comparing, for example, the incineration and the landfilling of a particular sludge.

One of the tools we are employing for this purpose is a modelling system which permits the tracing of various impacts and costs through any postulated set of hypothetical disposal alternatives. This method allows us to vary at will such parameters as sludge volume and composition, local air quality, local soil characteristics, and local transportation costs. In this way, we can gain insights into the relative advantages and problems of alternative disposal practices and test the effects of varying management approaches in reducing pollution potential. We have also recognized, as have many others, that sludge management involves many different kinds of effects and risks. Frequently, policy formulation is confounded by the inability to segregate out these different effects and risks so that truly meaningful comparisons can be made. Using the concepts of risk segregation (such as separating long-term from short-term effects) and risk referents (such as comparing toxic contaminant effects with better known daily risks like automobile accidents) we hope to eliminate some of these "apples and oranges" problems, thus highlighting real differences and real opportunities for management solutions.

The overall effect involves a variety of both in-house and contractor tasks encompassing such areas as evaluating the many and varied current federal and State regulatory programs, evaluating alternative institutional structures, developing cost estimating models, and assessing the current technical state of sludge sampling and analysis. We are now well into the central analytic phase of the project with a target date of August for release of a draft of the guidelines for public review. While it is too early to predict the policy related outcome of this effort, we have already gained important new insights into such areas as the manner in which states currently regulate sludge disposal and the trends in the use of various disposal practices reflecting changing scientific knowledge, economics, and public concern.

In underscoring the importance of this effort, I believe that I need only reemphasize Mr. Eidsness' points with regard to its relationship to other EPA policies and programs. Sludge management is closely tied to major pollution control programs in all media, but in particular, the formulation of sludge management policy substantially overlaps policy formulation in the area of ocean disposal, pretreatment, and construction grants for publicly-owned treatment works. As one key example, the work of the Task Force will assist water program management in formulating a mechanism for addressing the alternatives to and needs for disposal as required by the recent New York City court decision. In a larger sense, the formulation of sound multi-media sludge management policy is a test case for similar multi-media problems involving other classes of waste materials. Accordingly, we believe that our efforts will have a learning value for EPA beyond the publication of sludge management guidelines per se.

In closing, I would like to emphasize what I believe are the key characteristics of this effort which distinguish it from previous EPA activities in the area of sludge management. First, we are examining the problem in a multi-media context, recognizing that the solution of an environmental problem in one medium may in fact create or exacerbate a problem in another. Second, we will present an analytic approach which will assist local officials (and the public) in assessing their sludge management problem under their local conditions. Third, we will include in our guidelines information and suggestions for addressing not only environmental impacts, but also economic impacts and beneficial uses. Fourth, we will be filling certain gaps in the existing regulatory framework and supplementing existing regulatory provisions. While this effort will certainly not solve all the problems of sludge management, we are convinced that it will move us far in the direction of sound environmental policy in this area, and I am pleased to have had the opportunity to present our work to this committee.

That concludes my prepared remarks. I will be pleased to answer any questions you may have.

Mr. D'AMOURS. Thank you, Mr. Davis, and Mr. Eidsness. There are approximately seven members here and the Chair is sure most, if not all of them, have questions.

The Chair is going to ask the staff to promptly notify the members with regard to the 5-minute rule so that we can proceed and everyone can get a fair chance at asking questions.

I am going to lead off, Mr. Eidsness, by asking you a few questions. Your analysis of the writ of mandamus provisions concludes that any permanent permit applicant could force the EPA to investigate any site of his choosing regardless of EPA's site designation priorities and the efficacy of the particular site.

Now, realizing that EPA has been extremely slow in meeting court-imposed and its own self-imposed deadlines and that the committee wants these studies done as expeditiously as possible, do you have any alternative that meets both of our concerns other than the mandamus procedure?

Mr. EIDSNESS. Mr. Chairman, I think the alternatives clearly lie in two areas. One is for EPA to better manage the process of site designation internally. And, second, that EPA enter into new and more clearly defined agreements with the U.S. Army Corps of Engineers in particular concerning our respective roles and responsibilities with respect to site designation.

As I mentioned earlier in my testimony I have taken a number of initiatives including bringing Dr. Tudor Davies into my office as an ocean expert to try to beef up our policy and technical expertise in that area.

I have been asked and given approval for reorganization to allow establishment of a marine organization which will have a senior executive professional manager at its helm.

I have already instituted discussions with Mr. Bill Gianelli, Assistant Secretary of the Army for Public Works. We met in recent weeks to begin serious negotiations on how we might better coordinate our activities. Clearly the writ of mandamus approach as my lawyers advise me—I must clarify that it was not my analysis but that of the lawyers who advised me if I understand it correctly—would put us in the position of perhaps having to go out and study sites which really aren't worth studying.

I think these answers really provide the greatest opportunity for better performance on the part of EPA in the future.

Mr. D'AMOURS. But still, Mr. Eidsness, given the history of this procedure, this subcommittee and committee have been hearing for a number of years now that site designation was going to be accelerated. It has been the rule rather than the exception that deadlines, even self-imposed, as I said earlier, are not met. And it has been going on for a while—in this administration and preceding ones.

On page 4 you testified that your schedule for completing site designations hasn't been met. The mandamus provision was intended to provide some kind of an impetus, something substantial and workable to insure that there is going to be more than just reorganization and reshuffling of staffs and the like and rededication to purposes which we have all seen in the past. We are aware that the mandamus provision may not be something that you like very well. In the best of all worlds it would not be something that we

would have to do. But given the fact that EPA's performance has been so poor in meeting deadlines, what could this committee, other than the mandamus provision, rely on for some type of assurance that we might finally move ahead and begin to complete site designations?

Mr. EIDNESS. Well, I think perhaps what you have already done which has raised this issue as higher priority within the EPA itself. I don't mean that it should be necessary to propose some change in the act to bring home the message that the Agency has to treat this issue in a much higher priority.

However, I must say with all candor I do not believe in the past EPA has treated this issue with high priority but it is now high priority within EPA currently.

I should also point out that we believe that there are legal mechanisms under the current statute to assure that the EPA moves forward and make progress and in fact that legal vehicle has been exercised in a lawsuit by the National Wildlife Federation.

We have been making substantial progress under the latest schedule and Mr. Steve Schatzow will give you some examples of that.

From a practical point of view, despite our best intentions there will always be contingencies we could not plan on. For example, we have been going through the process of trying to designate four sites in the Tampa Bay area which is an issue which was litigated for the disposal of dredge material.

We have done surveys upon which we based our draft environmental impact statement but as a result of public comment, including comment from Manatee County, Fla., from the State of Florida and others, it was clear that we needed to go back and do additional work, field work, and we did respond by sending our research vessel, the *Antelope*, to do that work.

So I guess while we always have good intentions and we have placed site designation as a high priority, there will always be circumstances under which we may not be able to meet schedules.

Mr. D'AMOURS. My time has expired. I will now pass the questioning on to Mr. Forsythe.

Mr. FORSYTHE. Thank you, Mr. Chairman. I would like to follow along with your line of questions.

What would your response be to the idea of the corps taking over the entire program in terms of site designation for dredge spoil disposal? Both you and the Corps of Engineers play a role.

Mr. EIDNESS. That is an issue that is being actively discussed with the Army Corps of Engineers. It certainly holds some possibilities for resolution of the problem that has been so clearly pointed out by the chairman.

It is also my understanding, however, that the Army Corps of Engineers has always had the authority and they have not used it because of prior agreements with EPA to designate sites and issue permits on their own.

I guess this is really the discussion that is now occurring with the Corps of Engineers: Is that the right approach to take or not? I wish I could give you a definitive answer today, Congressman, but I am afraid I cannot.

Mr. FORSYTHE. Well, I think it is one of the things that we should take into consideration. Apparently there are some discussions going on, as you say.

Mr. EIDSNESS. I think the overriding concern I have is that, EPA do the job it is supposed to do under the Marine Protection Act in this area.

I don't think it has done as good job as it could do, if the answer to that lies in an agreement with the Corps of Engineers that they should take full responsibility—I must correct my earlier statement. They don't have the authority to designate sites, but they have the authority to issue permits for disposal without designated sites—then I would certainly go in that direction, but that is still a matter of discussion between us and the Army Corps of Engineers.

Mr. FORSYTHE. Can you be any more specific on the timetable dealing with the 12, 60, and 106 mile sites?

Mr. EIDSNESS. I will do my best. I would like to turn that over to Mr. Steven Schatzow, who has day-to-day responsibility.

I always tell Steve, "Don't ever overpromise on dates," but he can give you an idea of the process we are going through.

Steve, would you answer that?

Mr. SCHATZOW. As you know, Congressman Forsythe, we proposed the final designation of the 106 mile site in December, and at the same time, solicited comments on the petition that we had received from New York and New Jersey municipalities to redesignate the 12 mile site. And we asked for comments on possible redesignation of the 60 mile site.

The comment period has expired. It expired on February 18. We are evaluating the information and public comments that have come in.

I believe that we will be in a position to make a decision on the 106 mile site where we received substantially less public comment within 3 months. In terms of making a decision on the 12 and 60 mile site, I think that may take somewhat longer.

We have received very extensive comments, a substantial amount of scientific information, which we have also expanded the time period for the municipalities involved, to give us additional information on the 12 mile site. The information deadline for the municipalities does not expire until May 2.

So I think that process will be longer. And I don't think at this time we could commit to a final deadline for making those decisions.

We are setting up a task force to look at the comments that come in and we will have to review those first.

Mr. FORSYTHE. Well, actually a decision on the 106 mile site really is not going to solve a whole lot unless you can make a decision on the 12 mile site. We will just be back in court unless the 12 mile site situation is resolved.

It sounds to me that it will be at least 6 months beyond May 2 before you a decision.

Mr. SCHATZOW. Well, I would point out what the agency said when it solicited comments, is that we would go through complete rulemaking on the question, so that once the information is analyzed and we would have to make a tentative decision. That decision would be either a proposal to redesignate the 12 or 60 mile site

or a proposal not to redesignate them. Then there would be an opportunity for further public comment at that point before final rulemaking.

So I would say 6 months is a conservative estimate.

Mr. FORSYTHE. I see my time has expired.

Mr. D'AMOURS. There will be other rounds of questioning for members of the subcommittees, if they want to wait for a second round.

Mr. Dyson?

Mr. DYSON. Thank you, Mr. Chairman.

I would like to continue this discussion on the 106 mile site. As you know, that is right off the coast of Delaware, Maryland, and Virginia, what is called the Delmarva Peninsula.

As I understand it, what the EPA is attempting to do is take an interim dump site and redesignate it as a permanent dump site.

Is that correct?

Mr. SCHATZOW. The 106 mile site is roughly 100 miles off of the Delaware Bay. That has been used historically for the dumping of certain kinds of industrial waste and sewage sludges.

It is designated as an interim site for the dumping.

Mr. DYSON. In the proposed regulations that came out in December which, as you just said, the comment period has ended, it is again my understanding that that would become then a permanent dump site, and at the same time, we are going to be broadening in the categories and quantities of the waste materials that will be dumped there.

Mr. SCHATZOW. The proposal would allow for its continued use both for industrial waste and would expand its use and allow its use for a 5-year period for municipal waste as well.

Now, I want to make clear, Congressman, that the designation of a site as a permanent site is not an authorization to dump at that site. Even after a site is designated, there is a subsequent public process through the permitting process before anyone can be authorized to actually dump at that site.

Mr. DYSON. You did just indicate that municipal sewage sludge would be permitted under the broadening regulations. And I understand they would have to go and get a permit.

Once that permit is obtained, the site is going to then be available.

Mr. SCHATZOW. The process would be that the site would be designated permanently, and then we would review any application that we received for dumping at that particular site.

Mr. DYSON. Well, my point is, New York and various cities in New Jersey go to you now for a permit, and once that permit is granted or obtained, they then go to the New York Bight and they dump there, correct? And now this new proposal for the 106 mile site could permit them, since there has been so much criticism associated with the New York Bight site, to go to what is called the 106 mile site and the 60 mile site?

Mr. SCHATZOW. None of the municipalities at this time have a permit for any site. They had interim permits to dump at the 12 mile site, the site of the New York Bight. Those permits expired December 31, 1981.

Mr. DYSON. I think what I am trying to say is we are taking an interim site, we being EPA, and EPA is now going to make that a permanent site. It is going to broaden the categories of waste materials that can be dumped there.

Now, I am taking this one step further and saying, can this, in fact, not be the area where a number of large municipalities can, in fact, dump their sewage?

Mr. SCHATZOW. It could be. Certainly I would imagine that if the Agency decides to reject the petitions of New York City and the other municipalities for continued designation of the 12 mile site, and if the agency were to designate the 106 mile site for municipal dumping, then I assume that those applicants would apply for permits to dump at the 106 mile site. I would imagine that is what would happen.

Mr. DYSON. I assume so, too.

Mr. EIDSNES. I might also add, Congressman, that the site designation process on the 106 mile site is following extensive environmental studies. It is not something we do overnight.

In addition, under section 102(a) it states that "in designating recommended sites, the administrator shall utilize, wherever feasible, locations beyond the Continental Shelf."

And this happens to be one of those sites.

Mr. DYSON. I am impressed with your research, but time and time again in many studies that have been taken, it has been proven that the ocean is certainly limited in its ability to assimilate waste, to detoxify any type of waste that may be dumped there. It seems to be running counter to a lot of the research that is coming out.

I might also add that in the original bill, the bill which the chairman of this committee is attempting to reauthorize through H.R. 1761, specifically set a deadline on ocean dumping for December 1981. The Congress time and time again is certainly not encouraging—but seems to be discouraging—ocean dumping.

Now, it seems to me that the EPA is coming up with an ideal permanent site, a 106 mile site which clearly, from what the gentleman right here said, is going to permit large municipalities, once they obtain the proper permits, to dump their sewage. We will then have a permanent dump site, which up to this point has been an interim site.

Mr. EIDSNES. There is a potential for that, but once again, the Administrator or his or her designee cannot issue a permit to allow disposal of sewage sludge or any other waste unless a finding has been made through public process, public comment and notice of rulemaking that this dumping will not result in unreasonable degradation.

I understand your concern that if we designate a site somehow that may suggest that, gee, that is going to be a place where, in fact, ocean dumping will be allowed of sewage sludge. But still, the statutory test requires that we make an independent determination on the basis of the information provided by the applicant, and the burden of proof is on him, that disposal of sludge by the applicant under terms of the permit would not result in unreasonable degradation.

We are certainly in an interesting position here where, on one hand, we are sort of behind the eight-ball in designating long-term disposal sites which are limited in their term for their use and subjected to review by the Agency; and, on the other hand, there seems to be a sentiment not to designate sites at all.

So we certainly should get on with one course or the other.

Mr. DYSON. Well, the bell is ringing for our attendance in the House, plus I've got a note that my 5 minutes is up.

I would like to ask unanimous consent of the chairman if I might submit for the record a letter that I sent to former Administrator Anne Burford relative to this question.

Mr. D'AMOURS. Without objection, that will be so ordered.

[The information follows:]

COMMITTEES:

ARMED SERVICES

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CRITICAL MATERIALS
MILITARY INSTALLATIONS
AND FACILITIES

MERCHANT MARINE AND
FISHERIES

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WILDLIFE AND FISHERIES
COAST GUARD

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TONY M. PAPPAS
ADMINISTRATIVE ASSISTANT



CONGRESSMAN ROY DYSON
UNITED STATES HOUSE OF REPRESENTATIVES

March 8, 1983

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The Honorable Anne M. Burford
Administrator
U.S. Environmental Protection Agency
Washington, D.C. 20460

Dear Administrator Burford:

I am writing to convey my strong opposition to the EPA's plans to change the interim status of the 106-Mile Ocean Dump Site and allow the dumping of industrial waste to continue at the site indefinitely.

As you know, the 106-Mile site, located approximately 100 miles off the Maryland and Delaware coasts, has been used over the past 22 years as a dumping ground for chemical wastes, industrial acids, radioactive materials and sewage sludge. The EPA now plans to approve the site as a permanent dumping ground for industrial waste and to allow New York and New Jersey to dump municipal sewage sludge there for a trial period of five years.

I urge you to reconsider these proposals, which have potentially ruinous consequences for Maryland's lower Eastern Shore and the Chesapeake Bay, Maryland's most important natural resource. Should even a small amount of these contaminants reach Ocean City, Maryland, they would effectively wipe out the resort's seafood industry and tourist trade. The economic impact of such a catastrophe would be felt throughout the state.

The damage that might be done to the Chesapeake Bay is an even greater concern. Oceanographic research indicates that off-shore water and sediment movement is vectored into the mouth of the Bay. The same might easily be true of the pollutants dumped at the 106-Mile site.

The economic value of the Bay's resources amounts to more than \$668 million a year. As I am sure you are aware, the Bay's resources are in steep decline. Staggering drops in the numbers of certain fish, especially striped bass, have thrown hundreds of commercial fishermen out of work, forcing them into other seafood markets that are already overcrowded. A six-year study by your own agency has uncovered dangerously high levels of pollutants in certain parts of the estuary. Simply put, the Ches-

apeake Bay cannot withstand further assaults on its resources.

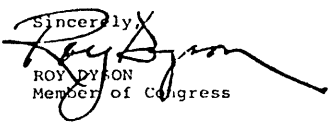
For the same reasons, I oppose the EPA's plans to allow New York and New Jersey to dump municipal sewage sludge at the 106-Mile site for a period of five years. As far as I can tell, the EPA has little or no idea where the sludge would travel after being dumped. The New York City Department of Environmental Protection, in analyzing the EPA's plans for the 106-Mile site, stated that, "no adequate site-specific and seasonal data base exists against which the effects of dumping might be assessed." I understand that the EPA would study the effects of the dumping during the five-year trial period, but that only serves to make Maryland and Delaware unwilling participants in a potentially disastrous experiment.

I am also very concerned about the possible effects of moving dumping operations from the 12-Mile dump site, which is closer to New York City, to the 106-Mile site. The 12-Mile site will be closed once it is no longer safe to continue dumping there. Transferring dumping operations to the 106-Mile site would increase the volume of waste disposal at the site 25 times, far in excess of what Maryland residents would view as an acceptable level.

In a related development, I understand that the EPA is thinking of opening up the same region of the Atlantic Ocean to PCB-incineration and the disposal of low-level radioactive waste. Combined, these proposals present a serious threat to Maryland's coastal resources as well as to marine life in the Chesapeake Bay. Again, I urge you to reconsider your plans in this area.

With best wishes and regards, .

Sincerely,


ROY DYSON
Member of Congress

Mr. D'AMOURS. The Chair will now recognize Mrs. Schneider.

Mrs. SCHNEIDER. Do we have to run over for a vote, Mr. Chairman?

Mr. D'AMOURS. No, that was an adjournment.

Mrs. SCHNEIDER. Wonderful.

Mr. Eidsness, I wonder if you could tell me, does the NEPA or the Marine Sanctuaries Act require an EIS be prepared for each different dump site?

Mr. EIDSNESS. The Marine Protection Act per se does not, but it is my understanding that former Administrator Russell Train made a voluntary agreement to conduct what amounts to a full-blown environmental impact statement in site designation, and the Agency has been following that ever since then.

Mrs. SCHNEIDER. To this day?

Mr. EIDSNESS. To this day, yes.

Mrs. SCHNEIDER. Is there any discussion in the ranks of EPA of recycling your policy on designating EIS's?

Mr. EIDSNESS. I have thought about that personally, in my mind, the question of whether full-blown EIS following NEPA procedures is advantageous from the point of view of public involvement or not.

Clearly, the statutory test we have to meet in designating a dump site or, alternatively, allowing a permit to go forward calls for the same kinds of considerations that one would undertake in the environmental impact statement process.

Also, the process of public disclosure, public involvement of NEPA and that under the Marine Protection Act are essentially the same, but there are no active plans under way right now to modify that policy.

Mrs. SCHNEIDER. Could I get an assurance from you that if there are any plans of making alterations there you will be sure to notify me or this committee?

Mr. EIDSNESS. Well, I certainly shall, and I would very much like to hear what your views are or the committee's views on this.

Mrs. SCHNEIDER. Well, we would be more than happy to offer those, but we are getting a little tired, sleeping with one eye open every night, and finding out one thing or the other is being shifted over at EPA. So we would appreciate it if you would bring that to our attention.

Mr. EIDSNESS. We would be more than happy to.

Mrs. SCHNEIDER. Another thing that Mr. Davis was discussing, in EPA's research activities, you neglected to mention research on the development of alternative sludge treatment mechanisms, or ways in which you could possibly make the sludge usable for either land or water environments.

I understand you are looking at a multimedia approach, but I wonder if you could elaborate a little bit on that, please.

Mr. DAVIS. I neglected to mention that because I cut that out for time reasons.

We are clearly interested in all of the options for sludge disposal and reuse that are possible, and certainly land application is one of the major areas because there is considerable information already available that sludge is a good fertilizer and has good soil condi-

tioning properties. It contains amounts of nitrogen and phosphorus that are advantageous.

There is a great deal of research going on in that area, some of it is at EPA and some of it elsewhere, and we are very much involved in assessing and even, to some degree, sponsoring that research.

We will include that information in our assessment.

We are not focusing necessarily on disposal as in wastage. We are looking at reuse and recycling as well.

Mrs. SCHNEIDER. Is that being reflected in your budget?

Mr. DAVIS. I can't address that. I don't know.

Perhaps Mr. Eidsness can.

Mr. EIDSNESS. I will have to supply an answer to that. I just went through the budget hearings and I kind of remember something in the research budget related specifically to sludge, but I will have to provide you a response for the record at a later date.

[The following was received for the record:]

BUDGET ALLOCATIONS ON SLUDGE

EPA allocates a substantial amount of research dollars to study sludge disposal methods and health impacts of sludge disposal. In fiscal year 1983, the Agency has allocated 13.4 permanent workyears and \$1,093,000 to evaluate and assess the health effects of improved treatment, utilization, and disposal methods for the management of municipal sludge. The Agency is also evaluating utilization of different types of disposal methods for the management of municipal sludge. The aims of this research are to reduce the amount of sludge generated and render it amenable for beneficial uses for off-site disposal. In 1983, the Agency is allocating 18 permanent workyears to this program with a total of \$2,267,000.

Mrs. SCHNEIDER. I would be very interested in seeing if the interest that you articulate is reflected with dollar amounts being expended for those specific areas.

What degree of activity from your offices is there now involved in looking at, for example, the kind of activities going on at the Franklin Institute?

Mr. DAVIS. If you are referring to the work that involves the conversion of sludge into usable products?

Mrs. SCHNEIDER. Yes, the Eco Rock.

Mr. DAVIS. Yes. We are not actively involved in any of that research, or at least not in my group because it is primarily the policy group.

To the best of my knowledge, EPA does not have an active interest in that work.

Mrs. SCHNEIDER. But EPA did fund it, did they not?

Mr. DAVIS. I think initially, yes.

Mrs. SCHNEIDER. You did have a contract out.

Mr. DAVIS. That is correct. We had a contract out.

We are considering that to be one of the reasonable options that there is for sludge use. So we are considering that from a policy standpoint.

Mrs. SCHNEIDER. How soon will you reach a policy decision on that particular process?

Mr. DAVIS. All of the aspects of the policy work that we are dealing with will be addressed in this fiscal year, so by the end of this fiscal year—

Mrs. SCHNEIDER. At the end of this year, we can be assured of having a report on the option that is being developed at the Franklin Institute on sewer sludge disposal?

Mr. DAVIS. Yes, you can, as one aspect of our overall guidelines, although it might be inconclusive at that point if the research is inconclusive.

Mr. EIDSNESS. I am going to have to step in here.

Given that the report being prepared by the task force group will be developed in draft form this summer, we should be very cautious in promising that by the end of this fiscal year. There will literally be a report for your review. But it has always been my design to try to bring this issue to closure so far as we could this fiscal year.

Mrs. SCHNEIDER. Well, I think that one of the frustrations that many of us share as we seek to protect the taxpayers' dollars is that EPA has invested research dollars into the Franklin Institute's project. Many of the different analyses appear to point out that this is a viable technology.

I also happen to sit on the Science and Technology Committee, and one of the greatest frustrations is seeing that here we have the technology and the Federal Government is involved in promoting this technology, but only to a point, and then they are dropping it all when there are numerous municipalities across this country that could be taking advantage of this particular technology.

So let's hope that EPA is not just putting peanuts to this project and letting it run its own course, be on its own, and putting a few peanuts in another project and not solving the problem. Because we have been talking about alternatives to sludge disposal for years, and years, and years, long before it got here.

There are many people that I have discussed this issue with and they are getting tired of discussing it. They are looking for a solution.

So the sooner we can have an answer on what your policy analysis is of this particular technology, at least that would be something tangible that we could hold on to and go back to our constituents and say, "Look, we really have something, and we are doing something good with your money."

Mr. EIDSNESS. I would like to respond to that.

I would like to think we could give you and others in the public a definitive statement on the right and wrong way to go about managing sludge, whether it is a disposal medium or recovery type mode. But the fact of the matter is, as an engineer I can tell you that regardless of what we develop in terms of research, and technical guidance, and human health and cost estimation, and so forth, the decisions that are made by the municipality will have to be made in the context of the reality that a municipality faces on a case-by-case basis.

So the guidance is needed but decisions will still have to be engineered and planned for at the local level, and all Federal regulatory and statutory requirements met in that process.

Mrs. SCHNEIDER. That is absolutely understood, but—

Mr. D'AMOURS. The gentlelady's time has expired.

I recognize Mr. Carper.

Mr. CARPER. Thank you, Mr. Chairman.

I welcome the panelists here this afternoon. I serve as a Congressman from Delaware, and I would like to reiterate that we in Delaware are very concerned about the impending designation of the 106 mile site.

I would like to ask you today if there have been any public hearings scheduled on that proposed designation by the EPA.

Mr. EIDSNESS. No; there have not.

Mr. CARPER. I have written to Acting Administrator Mr. Hernandez strongly calling for such public hearings. Might I get a preview from you gentlemen today of what your agency's position might be on that request?

Mr. EIDSNESS. I would not want to contradict Dr. Hernandez since he is the Acting Administrator.

I have not seen your letter, and I would like to get back to you on that point. [A letter is being prepared to be sent directly to Congressman Carper.]

Mr. CARPER. If you would, please.

Mr. EIDSNESS. Yes.

Mr. CARPER. In common practice in a situation such as this, would a public hearing be held?

Mr. EIDSNESS. It depends on the degree of controversy, the complexity of the issue. I can think of instances where we have not had hearings and other cases where we have.

So I think it is pretty much a judgment call that has to be made by the Agency, taking into consideration a lot of other factors.

Mr. CARPER. Thank you. Let me follow up on that, if I could.

I understand that in January 1978, there were approximately 37 municipalities throughout the country who were dumping municipal sludge in either the Atlantic or the Pacific Ocean.

I further understand that today approximately 26 of those same 37 municipalities have terminated that dumping. That would leave approximately 10 or so which apparently continue to dump.

Could you just take a minute and explain to us today why two-thirds of those dumpers have reformed or have been able to terminate that dumping procedure and why the other 10 or so have persisted even to this day in dumping municipal sludge?

Mr. EIDSNESS. That is a big question, and I think any response I give you would be speculation.

I can only say that under the current Marine Protection Act, if a municipality can demonstrate that its disposal of sewage sludge in this instance does not result in unreasonable degradation, taking into consideration all the criteria enunciated in the act, then that decision would be permitted.

I think, perhaps what we could do is give you for the record, some history based on a review of what has gone on in the past about who did what and when. Perhaps out of that review of the record we could construct a good response to your question, but right now I feel a little edgy giving you any more than I have said.

Mr. CARPER. Clearly 26 of these municipalities are doing something or probably a combination of things differently today than they were 5 years ago. I think it would be of interest to me and the other committee members to find out what they are doing, and perhaps to make sure that that information or that knowledge is

being shared with the 10 or so municipalities that continue to dump.

[The following annual report to Congress giving some history of the program was submitted for the record:]

United States
Environmental Protection
Agency

Office of Water and Waste
Management
Washington, DC 20460

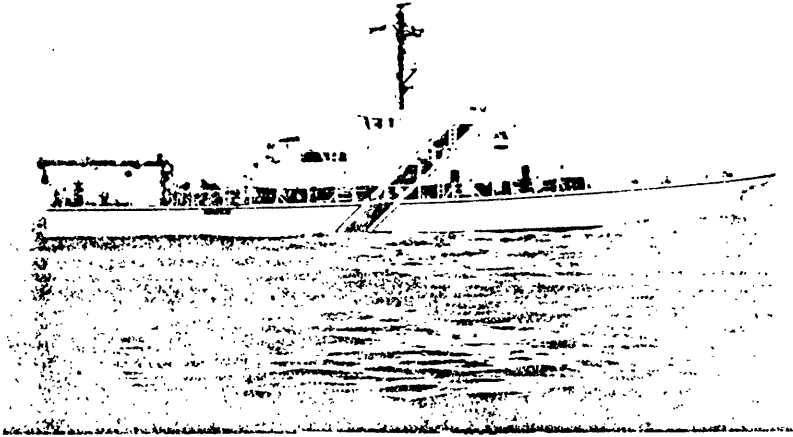
Jan-Dec 1980

Water



Annual Report to Congress Jan. - Dec. 1980

On Administration of the Marine
Protection, Research, and
Sanctuaries Act of 1972, as
Amended (P.L. 92-532) and
Implementing the International
Ocean Dumping Convention





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 30 1981

THE ADMINISTRATOR

Honorable Thomas P. O'Neill, Jr.
Speaker of the House
of Representatives
Washington, D.C. 20515

Dear Mr. Speaker:

Section 112 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended, requires the Administrator of the Environmental Protection Agency (EPA) to submit an annual report on the administration of the ocean dumping permit program authorized under Title I of the Act. The ninth annual report for this program is transmitted with this letter.

The ocean dumping permit program became effective on April 23, 1973, and final regulations and criteria were published on October 15, 1973. Revisions to those regulations and criteria were published on January 11, 1977. This report covers the activities carried out under the Act and those necessary to implement the London Dumping Convention during calendar year 1980.

The dumping into ocean waters of all material, except dredged material, is regulated by EPA permits; the U.S. Army Corps of Engineers issues permits for dredged materials. We hope that the information provided in this report will be useful to the House of Representatives in assessing the status and direction of the program.

Sincerely yours,

Anne M. Gorsuch



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

DEC 30 1981

THE ADMINISTRATOR

Honorable George Bush
President of the Senate
Washington, D.C. 20510

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Sincerely yours,

A handwritten signature in black ink, appearing to read "Anne M. Gorsuch".

Anne M. Gorsuch

ANNUAL REPORT TO CONGRESS JAN. - DEC. 1980

ON ADMINISTRATION OF THE MARINE
PROTECTION, RESEARCH, AND SANCTUARIES
ACT OF 1972, AS AMENDED (P.L. 92-532)
AND IMPLEMENTING THE INTERNATIONAL
LONDON DUMPING CONVENTION

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INTRODUCTION

This is the U.S. Environmental Protection Agency's (EPA) ninth annual report to the Congress on the implementation of Title I of the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA), as amended. The report covers the Agency's authorities and responsibilities under the Act in carrying out the ocean dumping permit program activities conducted within EPA Headquarters and Regions during calendar year 1980.

The U.S. Army Corps of Engineers (COE), the U.S. Coast Guard (USCG), and the National Oceanic and Atmospheric Administration (NOAA) also have responsibilities under the Act, and will submit separate reports on their activities in implementing the Act. Consequently, this report does not contain a discussion of their activities, except as they impact the responsibility of EPA.

MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT
OF 1972, AS AMENDED (P.L. 92-532)

Program Authorized Under Title I

The purpose of Title I of the Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA) is to regulate transportation for ocean dumping, and to prevent the ocean dumping of any material which would unreasonably degrade or endanger human health, welfare, or amenities, or the marine environment, ecological systems, or economic potentialities. To implement this purpose and to control dumping in ocean waters, Title I of the Act establishes a permit system and assigns its administration to the EPA and COE.

Transportation from the United States of any radiological, chemical, or biological warfare agent or high-level radioactive wastes for dumping in ocean waters, the territorial seas, or the contiguous zone is prohibited. Transportation of other materials (except dredged materials) for the purpose of dumping is prohibited except when authorized under a permit issued by the Administrator of EPA. Based upon criteria outlined in Section 102 of the Act, the Administrator is required to establish and apply criteria for reviewing and evaluating permit applications. Such permits may be issued after determining that the dumping involved will not unreasonably degrade or endanger human health or the marine environment. Before a permit is issued, EPA must also give notice and opportunity for a public hearing. Dumping of dredged material is regulated under permits issued by the COE in accordance with the EPA criteria.

In addition, the Administrator is authorized to designate areas where ocean dumping may be permitted and any critical areas where dumping may be prohibited. EPA has authority to revoke or modify permits or to assess civil penalties for violation of permit conditions. In addition, the Attorney General may initiate criminal action against persons who knowingly violate the Act.

Also under Title I, the USCG is given the responsibility to conduct surveillance and other appropriate enforcement activities to prevent unlawful ocean dumping. More specifically, the USCG ensures that the dumping occurs under a valid permit and at the location and in the manner specified within the permit.

Title II requires NOAA to conduct a comprehensive program of research and monitoring regarding the effects of the dumping of material into ocean waters. Title III gives NOAA the authority to establish marine sanctuaries.

A 1977 amendment to the MPRSA requires that ocean dumping of "sewage sludge" cease as soon as possible and in any event no later than December 31, 1981. For the purposes of this amendment, the term "sewage sludge" is defined to mean "any solid or liquid waste generated by a municipal wastewater treatment plant the ocean dumping of which may unreasonably degrade or endanger human health, welfare, amenities, or the marine environment, ecological system, or economic potentialities."

On December 22, 1980, an amendment of significance was signed by the President. This amendment puts harmful industrial wastes under a similar ban which applies to harmful sewage sludge, i.e., that by December 31, 1981, all harmful industrial wastes can no longer be transported for dumping into ocean waters. However, this amendment, unlike that for sewage sludge, allows dumping of small quantities of these types of materials under a research permit for the purpose of determining whether unreasonable damage to the marine environment will result from dumping these materials and after consultation with the Department of Commerce that the potential benefits of this research will outweigh any adverse environmental impacts on the marine environment.

This same amendment also includes an addition which is of particular concern to those involved in dredging and disposal of dredged material into waters of Long Island Sound. Long Island Sound lies inside the baseline from which the territorial sea is measured and by definition under the MPRSA is excluded from regulations under the MPRSA. However, this amendment indicates that while Long Island Sound is not included under the MPRSA, but remains under Section 404 of the Clean Water Act of 1977, any disposal of more than 25,000 cubic yards of dredged material into Long Island Sound must be done in accordance with criteria developed for dumping under the MPRSA. This means that the dredged material must be evaluated according to the bioassay and bioaccumulation tests required for ocean dumping of dredged material.

During 1980 the Agency began considering the desirability of making the ocean dumping regulations more flexible based on new scientific knowledge and experience obtained since the 1977 regulations were published. EPA's policies regarding the ocean dumping of sewage sludge are in a state of flux as a result of Judge Sofaer's decision of August 28, 1981 in City of New York v. EPA, No. 80 Civ. 1677 ADS (S.D.N.Y.). EPA's policies will be more fully developed after EPA has had an opportunity to fully evaluate the ramifications of the final order in that case.

THE PERMIT PROGRAM

The Ocean Dumping Regulations and Criteria (40 CFR Parts 220-229) published January 11, 1977, permits the issuance of general permits for dumping small quantities of material having a minimal adverse environmental impact when dumped under prescribed conditions. Burial at sea of human remains or ashes, the transport of vessels by the U.S. Navy with the intent of sinking vessels during ordnance testing, the transport and disposal of derelict vessels that pose a threat to navigational operation are a few examples.

Special permits are issued for dumping materials which satisfy the criteria, but only for a maximum duration of three years for each permit. Fifteen special permits were issued in Region II during 1980.

Interim permits may be issued for a period not exceeding one year. Until the December 31, 1981 termination date, interim permits cover those materials that do not comply with the ocean dumping criteria for which there are no feasible land based disposal alternatives at present. Twenty-two interim permits were issued during 1980, all in Region II.

Emergency permits may be issued for the disposal of materials that pose adverse effects to human health. No emergency permits were issued during 1980.

Under the regulations in effect during 1980, research permits are issued for dumping material into the ocean when the determination is made that scientific merit outweighs the potential environmental damage that may result from dumping. Two research permits were issued during calendar year 1980.

Incineration at sea permits are issued in a similar manner as the research permits; however, a special permit is issued in cases where studies on the waste, the incineration method, the vessel, and the disposal site have already been conducted and the site designated.

Five special permits were issued in Region II during 1980 for the burning of wood pilings, including driftwood, derelict vessels, piling, etc. resulting from the cleanup of port facilities in New York Harbor.

Table I lists permittees on implementation plans to phase out ocean dumping during 1980. Table II lists permits issued or in effect, the materials and amounts dumped during 1980 by EPA permitting authority (Region or Headquarters). Table III summarizes the total amount of dumping during 1980 by coastal area and presents a comparison with the amounts dumped under EPA permit during preceding years.

During 1980, eight permittees were phased out in Region II, and one in Region III (Philadelphia) of ocean dumping, increasing the number of permits denied, phased out or withdrawn since the inception of the program. Table IV lists permits phased out, denied, or withdrawn during calendar year 1980.

TABLE I
PERMITTEES ON IMPLEMENTATION
PLANS TO PHASE OUT OCEAN DUMPING

<u>Region</u>	<u>Company/ Municipality</u>	<u>Location</u>	<u>Dump Site</u>	<u>Phase Out Date</u>
II	** Bergen Co. Util. Authority	NJ	SS	1981
	City of Glen Cove	NY	SS	1981
	** Joint Mtg. of Essex & Union Cos.	NJ	SS	1981
	** Linden-Roselle & Rahway Valley S.A.	NJ	SS	1981
	** Middlesex Co. Util. Authority	NJ	SS	1981
	Middletown Twp. Sew. Authority	NJ	SS	1981
	** Nassau Co. Dept. of Public Works	NY	SS	1981
	** New York City Dept. of Water Resources	NY	SS	1981
	** Passaic Valley Sew. Comm.	NJ	SS	1981
	*** Westchester Co.	NY	SS	1984
	NE Monmouth	NJ	SS	1981
	* West New York	NJ	SS	1981
	* American Cyanamid Company	NJ	106	1981
	* Bristol Alpha, Inc.	PR	PR	1981
	* Cyanamid Agri. de PR	PR	PR	1981
	DuPont-Edge Moor	DE	106	1983
	* Merck, Sharpe & Dohme	PR	PR	1981

II	NL Industries, Inc.	NJ	AC	1989
	* Pfizer	PR	PR	1981
	* Schering Corp.	PR	PR	1981
	* Upjohns Mfg. Co.	PR	PR	1981

SS = Sewage Sludge
 106= Chemical wastes
 PR = Chemical wastes
 AC = Acid

* Ceased ocean dumping as of date indicated.
 ** Renewal permit denied; administrative/judicial review underway.
 *** Under court order.

TABLE II
PERMIT ACTIVITY - CY 1980

<u>Permittee</u>	<u>Material Dumped</u>	<u>Actual Quant. Dumped (thousand wet tons)</u>
Bergen Co. Util. Auth.	sewage sludge	273
Glen Cove	sewage sludge	6
Joint Meeting	sewage sludge	416
Linden Roselle/ Rahway Valley	sewage sludge	347
Middlesex Co. Sew. Auth.	sewage sludge	1227
Middletown Twp. Sew. Auth.	sewage sludge	19
Nassau Co. DPW (1)	sewage sludge	465
NJ Municipalities	sewage sludge	97
New York City DEP	sewage sludge	3255
Passaic Valley Sew. Comm.	sewage sludge	654
Westchester Co. DEF	sewage sludge	425
City of Philadelphia	sewage sludge	125
Allied Chemical Corp.	acid wastes	40
NL Industries, Inc.	acid wastes	1907
Moran Towing Corp.(2)	construction debris	89
American Cyanamid Co.	industrial waste	68

Con Edison	industrial waste (fly ash)	2
Digester Cleanout	sewage sludge	52
DuPont - Edge Moor	acid waste	238
DuPont - Grasselli	industrial waste	237
Modern Trans. Co.	industrial waste	23
PCI International	industrial waste	361
Corps of Engineers(2)	wood incineration	5.6
New York City(2)	wood incineration	3.1
Ocean Burning(2)	wood incineration	0.8
Weeks(2)	wood incineration	1.0

(1) Includes Long Beach/W. Long Beach

(2) Quantities in thousand dry tons

TABLE III
 TYPES AND AMOUNTS OF OCEAN DISPOSAL BY GEOGRAPHIC/COASTAL AREA
 (IN APPROX. THOUSAND TONS)
 1973 - 1980

ATLANTIC(A)								
	1973	1974	1975	1976	1977	1978	1979	1980
Indus-trial Waste	3643	3642	3322	2633	1784	2548	2577	2928
Sewage Sludge	4898	5010	5040	5271	5134	5535	6442	7309
Const. Debris	974	770	396	315	379	241	107	89
Solid Waste	0	0	0	0	0	0	0	0
Explo-sives	0	0	0	0	0	0	0	0
Wood Incin.	11	16	6	9	15	18	45	10.5
Incin. Chemi-cals	0	0	0	0	0	0	0	0
GULF OF MEXICO(B)								
Indus-trial Waste	1408	938	120	100	60	.173	0	0
Sewage Sludge	0	0	0	0	0	0	0	0
Const. Debris	0	0	0	0	0	0	0	0
Solid Waste	0	0	0	0	0	0	0	0
Explo-sives	0	0	0	0	0	0	0	0
Wood Incin.	0	0	0	0	0	0	0	0
Incin. Chemi-cals	0	12.3	4.1	0	17.6	0	0	0

PACIFIC(C)								
	1973	1974	1975	1976	1977	1978	1979	1980
Indus-trial Waste	0	0	0	0	0	0	0	0
Sewage Sludge	0	0	0	0	0	0	0	0
Const. Debris	0	0	0	0	0	0	0	0
Solid Waste	240	200	0	0	0	0	998	0
Explo-sives	0	0	0	0	0	0	0	0
Wood Incin.	0	0	0	0	0	0	0	0
Incin. Chemi-cals	0	0	0	0	12.1	0	0	0
TOTALS OF A,B, AND C (IN APPROX. THOUSAND TONS)								
	1973	1974	1975	1976	1977	1978	1979	1980
Indus-trial Waste	5051	4580	3442	2733	1844	2548.173	2577	2928
Sewage Sludge	4898	5010	5040	5271	5134	5535	6442	7309
Const. Debris	974	770	396	315	379	241	107	89
Solid Waste	240	200	0	0	0	0	998	0
Explo-sives	0	0	0	0	0	0	0	0
Wood Incin.	11	16	6	9	15	18	45	10.5
Incin. Chemi-cals	0	12.3	4.1	0	29.7	0	0	0

TABLE IV
SUMMARY OF OCEAN DUMPING PERMITTEES/APPLICANTS
DENIED OR PHASED OUT FROM 1973 TO 1980

	I	II	III	IV	VI	REGION		Totals
						IX	X	
Action prior to April 1973 phased out	--	44	--	--	--	--	--	44
During the remainder of 1973								
withdrew	--	4	--	--	--	--	--	4
phased out	--	1	--	--	1	--	--	2
denied	--	--	--	--	1	--	--	1
During 1974								
withdrew	--	2	--	--	--	1	--	3
phased out	--	21	--	--	1	--	--	22
denied	--	1	1	--	1	1		4
During 1975								
withdrew	--	6	--	--	--	--	--	6
phased out	1	10	1	--	2	--	--	14
denied	--	--	--	--	--	--	--	--
During 1976								
withdrew	--	2	--	--	--	--	--	2
phased out	--	17	--	--	--	--	--	17
denied	--	130	--	--	1	--	--	131
During 1977								
withdrew	--	2	--	--	--	--	--	2
phased out	1	16	--	--	1	--	--	18
denied	--	--	--	--	--	--	--	--
During 1978								
withdrew	--	1	--	--	--	--	--	1
phased out	--	31	--	--	1	--	--	32
denied	--	1	--	--	--	--	--	1
During 1979								
withdrew	--	4	--	--	--	--	--	4
phased out	--	8	--	--	--	--	--	8
denied	--	1	--	--	--	1	--	2
During 1980								
withdrew	--	--	--	--	--	--	--	--
phased out	1	8	1	--	--	1	--	11
denied	--	--	--	--	--	1	--	1
Totals	3	310	3	--	9	5	--	332

TABLE V
OCEAN DUMPING PERMITS PHASED OUT
BY REGION II DURING 1980

<u>Permittee</u>	<u>Location</u>	<u>Date</u>
Cedar Grove	New Jersey	February 1980
Morris	New Jersey	August 1980
Totowa	New Jersey	July 1980
Wanaque	New Jersey	February 1980
Washington-Morris Co.	New Jersey	January 1980
West Paterson	New Jersey	July 1980
Merck & Co. (Rahway)	New Jersey	December 1980
Squibb Mfg., Inc.	Puerto Rico	April 1980

LONDON DUMPING CONVENTION

The Convention on Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention) was negotiated in London in November 1972 and came into force on August 30, 1975, following receipt of the required 15 ratifications or accessions. The Inter-Governmental Maritime Consultative Organization (IMCO), as the designated Secretariat, handles the administrative functions of the Convention.

The Convention is an international treaty requiring the Contracting Parties (member nations) to establish national systems to control substances leaving their shores for the purpose of being dumped at sea.

Annex I of the Convention contains a "black list" of substances whose dumping is prohibited unless they are only "trace contaminants" or would be rapidly rendered harmless. The substances on this list are mercury and cadmium and their compounds, organohalogen compounds such as DDT and PCB's, persistent plastics, and oil. Dumping of high level radioactive wastes, and chemical and biological warfare agents is completely prohibited. Annex II lists substances requiring special permits as well as special care in each dumping. These substances include: heavy metals, cyanides and fluorides, waste containers which could present a serious obstacle to fishing or navigation, and medium and low level radioactive wastes. Substances not listed in Annex I and II require a "general permit" and all dumping must be carried out with full consideration given to a list of technical considerations contained in Annex III. The Annexes are shown in the Appendix to this report.

The Convention provides that each party will take appropriate steps to ensure that the terms of the Convention apply to its flagships and aircraft and to any vessel or aircraft loading at its ports for the purpose of dumping. Full continuous use is to be made of the best available technical knowledge in implementation which, together with periodic meetings and planned participation by appropriate international technical bodies, is designed to keep the contents of the Annexes up to date and realistic in meeting the ocean pollution control needs stemming from ocean dumping.

As the U.S. authority for implementing the international requirements for control of ocean dumping, the MPRSA was amended in 1974 and also in 1980 to bring the Act into conformance with the Convention.

TABLE VI
CONTRACTING PARTIES TO THE LONDON DUMPING CONVENTION

Afghanistan
 Argentina
 Canada
 Cape Verde
 Chile
 Cuba
 Denmark
 Dominican Republic
 Federal Republic of Germany
 Finland
 France
 German Democratic Republic
 Guatemala
 Haiti
 Honduras
 Hungary
 Iceland
 Japan
 Jordan
 Kenya
 Libyan Arab Jamahiriya
 Mexico
 Monaco
 Morocco
 Netherlands
 New Zealand
 Nigeria
 Norway
 Panama
 Papua New Guinea
 Philippines
 Poland
 Portugal
 South Africa
 Spain
 Surinam
 Sweden
 Switzerland
 Tunisia
 Ukrainian SSR
 United Arab Emirates
 United Kingdom
 United States
 USSR
 Yugoslavia
 Zaire
 Byelorussian SSR

SITE DESIGNATIONS

In 1980, EPA revised its ocean dumping regulations to extend the interim designation of some ocean dumping sites pending completion of the Environmental Impact Statements (EISs) and formal rulemaking procedures, and to cancel the designation of some sites and extend other sites, mainly those for dredged material disposal, until the completion of site designation studies and formal designation. The Ocean Dumping Regulations and Criteria published by EPA in January of 1977 contained a list of approved interim ocean dumping sites. The interim designation of these sites was effective for a maximum of three years. This extension was necessary to assure that maintenance dredging of harbors and essential waste disposal into the oceans could be continued until necessary site designation studies were completed.

Two new sites were designated in 1980. One site, located in the San Nicolas Basin on the Southern California Outer Continental Shelf, was designated for the disposal of small amounts of formation cuttings, waste drilling mud and non-perishable solid waste from exploratory drilling wells on Tanner Bank. The other site, is located in the Pacific Ocean 2.9 nautical miles offshore of Tutuila Island, American Samoa, was designated for the disposal of fish cannery wastes which can no longer be accommodated on land.

EPA released four EIS's during the calendar year 1980. These EIS's include the New York Bight Acid Waste Disposal Site (Final); Hawaii Dredged Material Disposal Site (Final); 106-Mile Ocean Waste Disposal Site (Final-published in 1979); and the San Francisco Channel Bar Dredged Material Disposal Site (Draft only).

INCINERATION AT SEA

The EPA completed a Draft EIS for the designation of a North Atlantic Incineration Site. The site will be used for the incineration of toxic organic wastes, principally organohalogenes, generated in the Mid-Atlantic states. The purpose of the action is to provide an environmentally acceptable area for the thermal destruction of the wastes, in compliance with EPA Ocean Dumping Regulations. In January 1981, the EPA released a draft Environmental Impact Statement (EIS) on this site, located in the North Atlantic 140 n mi east of Delaware Bay. This site is 2400 to 2900 meters deep. Until final designation of the North Atlantic Incineration Site, wastes generated in the U.S. will be incinerated at the Gulf Incineration Site.

In February 1980, an Interagency Ad Hoc Work Group for the Chemical Waste Incinerator Ship Program was established to study at-sea incineration technology. The Work Group was directed to examine alternatives available to the Federal government leading to the design, construction, and operation of one or more incinerator ships. The "Report of the Interagency Ad Hoc Work Group for Chemical Waste Incinerator Ship Program" was completed in September 1980. This report focuses on the development of ocean incineration capabilities in the United States.

The significant action items in the report are: (a) Ad Hoc Work Group was expanded and redesignated the Interagency Review Board (IRB); (b) Maritime Administration (MARAD) and EPA were directed to pursue legislative amendments which would permit U.S. flag chemical incinerator ships; alternatives should be considered if viable applications for Federal assistance are not received from private operators within 12 months of authorization; (c) EPA is to seek Federal funds for conducting research to advance the state-of-the-art of incineration at sea; and (d) EPA, MARAD, and other Federal agencies are to develop a program to encourage State and local authorities in developing waterfront facilities and to promote construction of privately owned U.S. flag incinerator ships.

The IRB held two meetings during the autumn of 1980. The first meeting was held to consider the action items contained in the Ad Hoc Work Group's report. The purpose of the second meeting was to obtain comments and recommendations on how to pursue its objectives.

The motor tanker (M/T) Vulcanus, the only vessel presently available for use in the U.S., was converted in 1972 to a chemical tanker equipped with two large incinerators located at the stern. She is over 300 feet long and has a cruising speed from

10 to 13 knots. Her crew of 18 includes 12 to operate the vessel, six to operate the incinerators. Her tank capacity is 3,503 cubic meters and the maximum waste feed rate to the incinerators is 12.5 m³/hour.

The M/T Vulcanus meets requirements of IMCO concerning transport of dangerous cargo and is presently the only commercially available ship which meets the destruction efficiency regulations for incineration at sea under the London Dumping Convention.

In 1974 EPA determined that the Marine Protection, Research, and Sanctuaries Act applied to incineration at sea and that permitting would occur under the Act. The first U.S.-sanctioned incineration at sea took place on the M/T Vulcanus in October 1974 at an EPA designated site in the Gulf of Mexico; the most recent were conducted at the site in the Pacific Ocean during May-September 1977.

Since that time, the M/T Vulcanus has been operating out of LeHavre and Antwerp incinerating wastes from sources in several European countries, including the Netherlands, Belgium and France. All of the incineration occurs at a site in the North Sea.

TABLE VII
 TABLE OF U.S. OCEAN SUPPLIES OF RADIOACTIVE MATERIALS

PACIFIC OCEAN SITES								
Isotope Name Nucleon(s) ¹ , #	Depth (meters) ²	Central Coordinates ³	Relation to Land ³	Material ⁴	Activity ⁵	Containers ⁶	Agency ⁷	Years Used
P1 Pearl Islands (1)	000 - 1700	167°30'W 129°00'N	25 - 60 miles WSW San Francisco	U, S, SWH	14,500	47,500	NEC, OFC NRDL, CR AEC	1946-70
P2 Hawaii Islands ⁸ (1)	3000	155°20'W 197°25'N	20 miles NE Honolulu	"	0.09	29	WH	1955-60
P3 Midway Islands (2)	9490	169°30'W 194°32'N	300 miles N Midway Islands	"	14	7	MSL	1959-1960
P4 Santa Luis (2)	1830 - 1940	133°40'W 119°35'N	35 miles SW Port Hueneme	U, S	308	3,114	PH, AEC	1946-1962
P5 (1)	4294	142°12'W 129°31'N	230 miles W CR/CA border	"	0.86	26	CR	1955-1958
P6 (1)	2929	127°52'W 127°44'N	190 miles NW CR/CA border	"	0.08	4	CR	1960
P7 (1)	4099	142°04'W 126°01'N	35 miles W CR/CA border	"	0.08	4	CR	1960
P8 Los Angeles (2)	0000 - 4370	119°43'W 119°00'N	1000 miles WSW Los Angeles	"	0.98	26	CR	1955-1958
P9 (1)	3477	125°47'W 135°00'N	800 miles SW San Francisco	"	1.1	29	CR	1946-1960
P10 San Diego (2)	2210 - 3060	121°00'W 121°30'N	225 miles SW San Diego	U, S, SWH	34	4,418	CHCC, ISC	1959-1962
P11 Cape Monterey (1)	1800 - 1990	122°02'W 135°24'N	800 miles WSW San Francisco	U, S	0.22	29	AHL	1960
P12 Cape Scott 1 (1)	3294	150°36'W 130°03'N	350 miles NW Cape Flattery	U, S	96	187	AHL	1958-1966
P13 Cape Scott 2 (1)	3294	151°25'W 140°12'N	350 miles NW Cape Flattery	U, S	28	143	AHL	1962-1969
North Pacific (1)		159°30'W 134°01'N			0.54	38		1946-1962
North Pacific (1)		157°02'W 140°00'N			0.54	41		1946-1962
North Pacific (Un-.)		170°00'W 134°04'N			97.4	261		1946-1962
(1)	1430				1.2	37		1946-1962
(1)					98.5	231		1963-1966

Subtotals, Pacific Ocean

14980.46 Curies
56261, Containers

RADIOACTIVE WASTES

During 1980, EPA's Office of Radiation Programs presented testimony at two congressional hearings concerned with past ocean dumping of radioactive waste. In response to these hearings and considerable public interest, EPA summarized available information in a "Fact Sheet on Ocean Dumping of Radioactive Waste Materials." This fact sheet includes a history of dumping operations, an inventory of dumpsites, types and quantities of materials dumped, and summaries of EPA dumpsite surveys and contractor reports.

Table VII shows the preliminary inventory compiled by EPA from records of U.S. dumping of radioactive materials. EPA is now verifying this inventory by a detailed review of records obtained from other Federal agencies, including the Nuclear Regulatory Commission, the Department of Energy, the Department of Defense and the Coast Guard. This review is scheduled to be completed in late May 1981.

Based on results of its surveys, EPA concludes that past ocean dumping of radioactive wastes by the U.S. is not causing harm to either man or the marine environment.

Notes of explanation to Table VII are shown on page 23.

TABLE OF U.S. OCEAN DUMPING OF RADIOACTIVE MATERIALS

ATLANTIC OCEAN DISPOSAL SITES									
Disposal Site Designation ¹ &	Depth (meters)	Central Coordinates ²	Relation to Land ³	Materials ⁴	Activity ⁵	Containers ⁶	Agency ⁷	Years Used	EPA Reports
As Massachusetts Bay (1)	32	42°22'N 70°25'W	Massachusetts Bay	B S	2,440	4 000	CHES	1952-1959	NO
Ad Long Island (2)	1830 - 1967	36°30'N 74°22'W	80 miles E Cape Henry *	B	87	843	EDM	1949-1947	NO
Ad Sandy Hook 1 (3)	1830 - 2900	36°30'N 72°16'W	1/0 miles SE Sandy Hook *	B	74,400	14 308	AEC	1959-1962	YES
Ad Sandy Hook 2 (4)	1830 - 3000	37°50'N 70°25'W	220 miles SE	B	2,100.	14 500	AEC	1957-1959	YES
As Charleston (5)	915 - 3000	31°32'N 76°30'W	220 miles E Charleston *	B	0.66	119	SPB ARC	1955-1962	NO
As Norwood L-10 (6)	18	34°32'N 76°46'W	15 miles S of Norwood City *	B	0.3	unpacked	PG	1955-1961	NO
Ad - All Central Atlantic (7)	2000 - 2200	36°20'N - 44°09'N 68 00'W		B	480	432	ASTS	1958-1960	NO
Ad Sargasso Islands (8)	11		OFF coast of Sargasso Islands		0.008	liquid	US	1965-1960	NO

Subtotals Atlantic Ocean 79507.966 Curies
34203. Containers

GULF OF MEXICO DISPOSAL SITES

Disposal Site Designation ¹ &	Depth (meters)	Central Coordinates ²	Relation to Land ³	Materials ⁴	Activity ⁵	Containers ⁶	Agency ⁷	Years Used	EPA Reports
Gm	1930	27°14'N 89°23'W	170 miles S New Orleans *	B	10	1	MP	1958	NO
Gm	2111	25°48'N 88°13'W	250 miles SE Apalachicola FL *	B	0.002	78	SD	1955-1957	NO
Subtotals Gulf of Mexico					10.002 Curies, 79. Containers				
Totals All Sites					94490.27 Curies 90843. Containers				

Notes to Table VII

1 In contracting and licensing the ocean dumping of radioactive wastes, the AEC designated general areas for approved dumping. In some instances these areas were identified by single coordinates and the wastes were concentrated in relatively specific areas, while in other instances the AEC designated much broader areas and allowed those dumping to proceed according to general guidelines. Dumping under these designations resulted in much less concentrated dumping activities and a multitude of individual "dumpsites". The number of such individual dumpsites under a particular heading in this column is indicated in parentheses. The designations A1 through A12, GM1 and GM2, and P1 through P13 refer to the NRC site numbering system.

2 Central coordinates designate dumping areas thought to have received concentrations of waste materials. Actual coordinates may have varied over wider distances.

3 Approximations for land references: an asterick means that EPA has not plotted the coordinates on nautical charts to confirm the stated distance from land; blanks mean we haven't found the information yet.

4 Three types of materials were dumped under AEC licenses or by AEC contractors: by-product materials (B), Source materials (S), and special nuclear materials (SNM). By-product materials refer to a wide variety of substances which were exposed to incidental radiation. Source materials include uranium and thorium. Special nuclear materials include plutonium, uranium-233, enriched uranium 233 or 235, and any other materials which the AEC may have determined to be special nuclear materials.

5 Radioactivity is given in estimate curies at the time of packaging.

6 Waste materials were generally packaged in either special containers which were then placed in concrete-filled steel drums, or mixed directly in concrete which was in turn placed in steel drums.

7	AEC	U.S. Atomic Energy Commission
	AML	American Mail Lines
	ARC	Atlantic Refining Company
	CMDC	Crossroads Marine Disposal Corpoarition
	CR	Chevron Research
	FWS	U.S. Fish and Wildlife Service
	ISC	Isotope Specialty Company
	MP	Magnolia Petroleum
	MSTS	Military Sea Transport Service
	NEC	Nuclear Engineering Company
	NIH	U.S. National Institute of Health
	NRDL	U.S. Naval Radiological Defense Laboratory
	OTC	Ocean Transport Company

PN	Pneumodynamics
SMD	Socony-Mobil Oil
UG	University of Georgia
UH	University of Hawaii

8 There were some AEC approved ocean dumping sites for which EPA has no records of dumping activities. They are as follows:

<u>Pacific Ocean</u>		<u>Atlantic Ocean</u>	
<u>Latitude</u>	<u>Longitude</u>	<u>Latitude</u>	<u>Longitude</u>
39 ⁰ 30'N	125 ⁰ 40'W	41 ⁰ 33'N	65 ⁰ 30'W
37 ⁰ 40'N	124 ⁰ 50'W	41 ⁰ 33'N	65 ⁰ 33'W
36 ⁰ 00'N	124 ⁰ 00'W	41 ⁰ 28-38'N	65 ⁰ 28-45'W
34 ⁰ 30'N	122 ⁰ 50'W	38 ⁰ 30'N	72 ⁰ 00'W
		36 ⁰ 30'N	74 ⁰ 13'W
		36 ⁰ 15'N	76 ⁰ 35'W
		34 ⁰ 15'N	76 ⁰ 35'W

9 Based on NRC memorandum of 8/14/80 additional dumpings appear to have taken place in the 1960's and are being characterized in ongoing records research.

10 Under the terms of the AML license AML was authorized to dump along the path of its shipping route beyond depths of 1,000 fathoms (1830 meters).

11 Report published by NOAA in April 1973 "Submersible Inspection of Deep Ocean Waste Disposal Sites Off Southern California" describes survey of Santa Cruz Basin.

* See footnote number³ above.

OSV ANTELOPE

The OSV ANTELOPE is EPA's ocean survey vessel, working in support of ocean dumping site investigations. Under the MPRSA, EPA received responsibility for regulating ocean dumping, designating and managing dumping sites, and assessing the consequences of ocean dumping.

The ANTELOPE was a Navy patrol gunboat prior to her conversion to a scientific platform for EPA. She carries both over-the-side deck sampling gear and laboratory instruments for analysis on-site.

The ANTELOPE's work represents EPA's first and most comprehensive effort to collect a broad base of ocean pollution data for regulatory programs. EPA will use the data gathered by the ANTELOPE to prepare EIS's on the sites and to guide EPA's future management of them. Figure 1 shows ocean disposal sites sampled in 1980.

EPA's ocean survey vessel ANTELOPE has completed her second season surveying ocean disposal sites off the U.S.

In 1980, ANTELOPE traveled 23,104 miles to accomplish 16 surveys, totaling 23 separate EISs. The field survey program has concentrated on those sites receiving large amounts of material and those at which dumping has occurred for many years. These surveys also provide a baseline for future assessments of the environmental impacts of continued use of these sites.

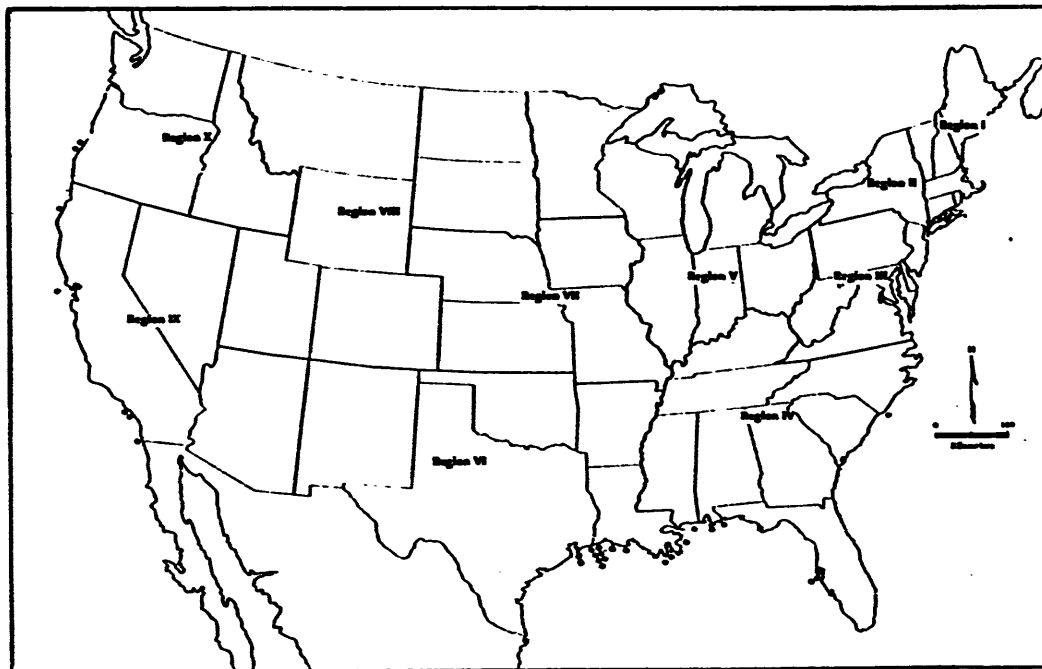


FIGURE I
OCEAN DISPOSAL SITES SAMPLED IN 1980

ENFORCEMENT

The U.S. Coast Guard has responsibility for surveillance activities to prevent unlawful dumping or transportation of materials for dumping and to assure compliance with ocean dumping permit conditions.

Vessel and aircraft patrols, shipriders on board dumping vessels, in-port boardings and inspections, and Vessel Traffic Services (VTS) radar are several methods used by the Coast Guard for surveillance of ocean dumping operations. The scheduling of surveillance resources is aided by a permit condition which requires permittees to give authorities advance notification prior to commencing any dumping operations.

Statistics on ocean dumping surveillance activities are reported by field units on a quarterly basis. This information provides an accurate assessment of the impact of the program on Coast Guard resources and also enables the Coast Guard to report on its operations to interested parties.

In calendar year 1980, 4,642 dumps were reported to the Coast Guard. A total of 602 surveillance missions were conducted over these activities, 198 for industrial wastes and 404 for other wastes. In some cases, more than one dump vessel would be observed on a particular surveillance mission.

Of the total 602 missions conducted, 15 were performed by vessels, 306 by aircraft, and 281 by shipriders. There were 78 vessel hours and 533 aircraft hours utilized to conduct these missions. In addition to the extensive number of manhours these figures represent, 10,984 shiprider hours were required.

Violations are detected and a deterrent against action is provided. Pursuant to Section 107(c) of the MPRSA and the regulations promulgated there under (40 CFR 223), information concerning violations of the Act and of ocean dumping permit conditions is forwarded to the EPA Regional Administrator for appropriate action when civil penalties are indicated or to the Attorney General for criminal cases. Suspected violations are documented by the Coast Guard to the maximum extent practicable. Evidentiary material may include witness statements, photos, samples, message traffic, and log excerpts.

During calendar year 1980, cases were forwarded to EPA consisting of six alleged violations. These alleged violations ranged from dumping or incinerating outside the authorized area to dumping plastic floatables and improper departure notification. Table VIII gives a breakdown of the violations, the Coast Guard district they occurred in, date of violation, and date referred to EPA for disposition. Also included are several cases for which action had been pending from a previous year and final disposition occurred in 1980. There were no cases referred to the Attorney General by the Coast Guard or EPA in the calendar year 1980.

TABLE VIII
ENFORCEMENT ACTIONSRegion II

Order No:	78-21
Respondent's Name:	Squibb Mfg., Inc.
Referral From:	EPA
Type of Violation:	Permit condition, Compliance schedule
Complaint Issued:	Waived
Disposition:	Final Order-12/28/78; \$12,000 penalty payment. Revision of schedule
Disposal Site:	Chemical wastes P.R.
Order No:	79-1
Respondent's Name:	City of Asbury Park
Referral From:	EPA
Type of Violation:	Permit condition, Compliance schedule
Complaint Issued:	07/17/79
Disposition:	Final Order-11/08/79; Cease dumping end of 1979
Disposal Site:	Sewage Sludge
Order No:	79-2
Respondent's Name:	American Cyanamid
Referral From:	EPA
Type of Violation:	Permit condition, Compliance schedule
Complaint Issued:	07/27/79
Disposition:	Final Order-12/21/79; \$5,000 penalty payment and revision of schedule
Disposal Site:	Chemical wastes
Order No:	80-2
Respondent's Name:	W. New York
Referral From:	EPA
Type of Violation:	Permit condition, Compliance schedule
Complaint Issued:	Waived
Disposition:	Final Order-6/24/80; \$10,000 penalty payment and cease dumping by 3/2/81
Disposal Site:	Sewage sludge
Order No:	80-3
Respondent's Name:	DuPont-Edge Moor
Referral From:	EPA
Type of Violation:	Permit condition, Compliance schedule
Complaint Issued:	10/24/80
Disposition:	Final Order-12/19/80; Revision of schedule
Disposal Site:	Chemical wastes

Order No:	81-1
Respondent's Name:	Weeks Stevedore Co.
Referral From:	USCG
Type of Violation:	Burning in other than authorized site
Complaint Issued:	2/27/81
Disposition:	Pending
Disposal Site:	Wood incineration

APPENDIX

ANNEXES TO THE LONDON DUMPING CONVENTION

1

ANNEXES TO THE LONDON DUMPING CONVENTION

ANNEX I

1. Organohalogen compounds.
2. Mercury and mercury compounds.
3. Cadmium and cadmium compounds.
4. Persistent plastics and other persistent synthetic materials; for example, netting and ropes, which may float or may remain in suspension in the sea in such a manner as to interfere materially with fishing, navigation or other legitimate uses of the sea.
5. Crude oil and its wastes, refined petroleum products, petroleum distillate residues, and any mixtures containing any of these, taken on board for the purpose of dumping. ^{1/}
6. High-level radioactive wastes or other high-level radioactive matter, defined on public health, biological or other grounds, by the competent international body in this field, at present the International Atomic Energy Agency, as unsuitable for dumping at sea.
7. Materials in whatever form (e.g. solids, liquids, semi-liquids, gases or in a living state) produced for biological and chemical warfare.
8. The preceding paragraphs of this Annex do not apply to substances which are rapidly rendered harmless by physical, chemical or biological processes in the sea provided they do not:
 - (i) make edible marine organisms unpalatable, or
 - (ii) endanger human health or that of domestic animals.

The consultative procedure provided for under Article XIV should be followed by a Party if there is doubt about the harmlessness of the substance.

9. This Annex does not apply to wastes or other materials (e.g. sewage sludges and dredged spoils) containing the matters referred to in paragraphs 1-5 above as trace contaminants. Such wastes shall be subject to the provisions of Annexes II and III as appropriate.

10. Paragraphs 1 and 5 of this Annex do not apply to the disposal of wastes or other matter referred to in these paragraphs by means of incineration at sea. Incineration of such wastes or other matter at sea requires a prior special permit. In the issue of special permits for incineration the Contracting Parties shall apply the Regulations for the Control of Incineration of Wastes and Other Matter at Sea set forth in the Addendum to this Annex (which shall constitute an integral part of this Annex) and take full account of the Technical Guidelines on the Control of Incineration of Wastes and Other Matter at Sea adopted by the Contracting Parties in consultation. ^{2/}

^{1/} Originally stated: "Crude oil, fuel oil, heavy diesel oil, and lubricating fluids, hydraulic fluids, and any mixtures containing any of these, taken on board for the purpose of dumping." Amendments adopted by Contracting Parties September 1980; accepted by the United States

^{2/} Added by amendment adopted by Contracting Parties October 1978; accepted by the United States.

ANNEX II

The following substances and materials requiring special care are listed for the purposes of Article VI(1)(a).

A. Wastes containing significant amounts of the matters listed below:

arsenic	}	and their compounds
lead		
copper		
zinc		
organosilicon		
cyanides		
fluorides		
pesticides and their by-products not covered in Annex I.		

B. In the issue of permits for the dumping of large quantities of acids and alkalis, consideration shall be given to the possible presence in such wastes of the substances listed in paragraph A and to the following additional substances:

beryllium	}	and their compounds
chromium		
nickel		
vanadium		

- C. Containers, scrap metal and other bulky wastes liable to sink to the sea bottom which may present a serious obstacle to fishing or navigation.
- D. Radioactive wastes or other radioactive matter not included in Annex I. In the issue of permits for the dumping of this matter, the Contracting Parties should take full account of the recommendations of the competent international body in this field, at present the International Atomic Energy Agency.
- E. In the issue of special permits for the incineration of substances and materials listed in this Annex, the Contracting Parties shall apply the Regulations for the Control of Incineration of Wastes and Other Matter at Sea set forth in the Addendum to Annex I and take full account of the Technical Guidelines on the Control of Incineration of Wastes and Other Matter at Sea adopted by Contracting Parties in consultation, to the extent specified in these Regulations and Guidelines.^{3/}
- F. Substances which, though a non-toxic nature, may become harmful due to the quantities in which they are dumped, or which are liable to seriously reduce amenities.^{4/}

^{3/} See footnote 2.

^{4/} Added by amendment. See footnote 1.

ANNEX III

Provisions to be considered in establishing criteria governing the issue of permits for the dumping of matter at sea, taking into account Article IV(2), include:

A. Characteristics and composition of the matter

1. Total amount and average composition of matter dumped (e.g. per year).
2. Form, e.g. solid, sludge, liquid, or gaseous.
3. Properties: physical (e.g. solubility and density), chemical and biochemical (e.g. oxygen demand, nutrients) and biological (e.g. presence of viruses, bacteria, yeasts, parasites).
4. Toxicity.
5. Persistence: physical, chemical and biological.
6. Accumulation and biotransformation in biological materials or sediments.
7. Susceptibility to physical, chemical and biochemical changes and interaction in the aquatic environment with other dissolved organic and inorganic materials.
8. Probability of production of taints or other changes reducing marketability of resources (fish, shellfish, etc.).

B. Characteristics of dumping site and method of deposit

1. Location (e.g. co-ordinates of the dumping area, depth and distance from the coast), location in relation to other areas (e.g. amenity areas, spawning, nursery and fishing areas and exploitable resources).
2. Rate of disposal per specific period (e.g. quantity per day, per week, per month).
3. Methods of packaging and containment, if any.
4. Initial dilution achieved by proposed method of release.
5. Dispersal characteristics (e.g. effects of currents, tides and wind on horizontal transport and vertical mixing).
6. Water characteristics (e.g. temperature, pH, salinity, stratification, oxygen indices of pollution--dissolved oxygen (DO), chemical oxygen demand (COD), biochemical oxygen demand (BOD)--nitrogen present in organic and mineral form including ammonia, suspended matter, other nutrients and productivity).
7. Bottom characteristics (e.g. topography, geochemical and geological characteristics and biological productivity).
8. Existence and effects of other dumpings which have been made in the dumping area (e.g. heavy metal background reading and organic carbon content).
9. In issuing a permit for dumping, Contracting parties should consider whether an adequate scientific basis exists for assessing the consequences of such dumping, as outlined in this Annex, taking into account seasonal variations.

C. General consideration and conditions

1. Possible effects on amenities (e.g. presence of floating or stranded material, turbidity, objectionable odour, discolouration and foaming).

2. Possible effects on marine life, fish and shellfish culture, fish stocks and fisheries, seaweed harvesting and culture.

3. Possible effects on other uses of the sea (e.g. impairment of water quality for industrial use, underwater corrosion of structures, interference with ship operations from floating materials, interference with fishing or navigation through deposit of waste or solid objects on the sea floor and protection of areas of special importance for scientific or conservation purposes).

4. The practical availability of alternative land-based methods of treatment, disposal or elimination, or of treatment to render the matter less harmful for dumping at sea.

Mr. EIDSNESS. We are preparing a report to Congress on ocean dumping, and I expect we will have good information in that report for you.

Also, I would want to look to see whether the tonnage of disposed sewage sludge has gone up or down, notwithstanding the fact that there are fewer municipalities doing it.

My gut feeling is that you will probably see that there is an increase of sludge being disposed, and the reason is, under the Clean Water Act, municipalities have to meet secondary treatment standards and that is what generates all this sludge. When they get into compliance with secondary treatment, they take pollutants out of liquid waste and they end up getting a solid or sludge form.

So, we clearly have a problem with growing volumes of sludge that have to be disposed of in some safe manner or managed or recycled. And that is what we are trying to develop an understanding of the best way to go on.

Mr. CARPER. My third question concerns the EPA's position on the imposition of user fees as envisioned by the National Wildlife Federation, where the opportunity costs of ocean dumping would be considered in determining those fees.

Would you or one of your colleagues care to comment on that, please?

Mr. EIDSNESS. Excuse me. We are having a little caucus.

I am not aware of that proposal. I have not seen that and neither has Steve Schatzow, Director of our program.

But if their proposal, in effect, constitutes a penalty type of a fee system, I would find that very difficult to justify in terms of public policy and probably extremely difficult to rationalize in terms of what is the right fee.

I don't know what the proposal is, however.

Mr. CARPER. Mr. Chairman, do I have more time?

Mr. D'AMOURS. You will be notified when your time has expired. I understand the hook is coming now, so you better hurry up.

Mr. CARPER. The AAPA will testify later today, I believe, that the provisions of H.R. 1761 are too restrictive and require unnecessary and costly monitoring in some cases.

Do you agree or is there enough flexibility in the language to allow rational application of monitoring.

Mr. DAVIES. We consider that there is flexibility in the language. We are concerned that we are not tied down to specific monitoring protocols.

We considered that the site and the waste itself should govern the monitoring provisions that are put into a permit. And we would prefer to have great flexibility in exercising that design.

Mr. CARPER. Thank you, Mr. Chairman.

Mr. D'AMOURS. The gentleman's time has expired.

Mr. Bateman, do you have any questions of the witnesses?

Mr. BATEMAN. Thank you, Mr. Chairman.

I find myself not knowing nearly as much as I need to know about what we are discussing today and would like, Mr. Chairman, to reserve the right to submit further questions in writing at a later date with respect to this ocean dumping program.

I guess one of the things that I most want to focus on is the reference that has been made to a number of cities who are dumping

or historically have been dumping sewage sludge at various places in the ocean and that number has now been reduced to where only 26 are.

What do municipalities who never have dumped in the ocean do with their sludge?

Mr. EIDSNESS. Let me give you an answer from my own personal experience. If a municipality many, many years ago, long before Federal Clean Water Acts and Federal Solid Waste Acts and Federal Ocean Dumping Acts had the foresight to acquire some land, made some capital investments, they are probably the ones that have alternatives to ocean dumping or alternatives to incineration, as the case may be.

In the last decade, as you know, we have had layering upon layering of Federal, State, and local laws, regulations, ordinances which make it extremely difficult in a political as well as a legal sense for a municipality to find an adequate disposal site or management site for sewage sludge.

And I think that is the reality we face. It is an adjunct of the public's desire to have a safe, clean environment.

Mr. BATEMAN. I don't think anyone is questioning the desirability of a safe, clean environment but I am still left with a lot less information that I would like to have. Why is it dozens of cities in the United States have been able to deal with this problem and possibly even the higher and more expensive ways of properly dealing with this problem while others, perhaps, use the cheaper approach of taking it out in the ocean and dumping it?

Mr. EIDSNESS. Well, let me go at the answer another way; and this comes from my local government experience. Not all local governments make their decisions based on the most economical thing for them to do. In fact, I think of some local governments that have made decisions on sludge management which are not the most economical, but they see other benefits and there is a lot of local support for a broader type of a program but local governments also have various financial policies which circumscribe the manner in which they pass on the cost of doing things such as sludge management or sewage treatment to their community, to the customers.

If local governments have had policies which have held rates lower than they ought to have been in order to finance these types of systems, then it is very difficult for them mathematically to make major increases in their rates. So I think some of them are caught by their own designs and own public finance practices whereas others are not.

Mr. BATEMAN. Well, to the extent that agencies of the government and in this instance the Federal Government, are going to continue to allow them to pursue the economical recourse of taking it to a designated place in the ocean and dumping it, they will forever be existing with their lower user fees contrasted to the communities in my district who pay high fees in order to be able to dispose of sludge and to treat their sewage in a proper manner without these economies.

Mr. EIDSNESS. I want to clarify for the record that there is absolutely no policy that I am aware of in EPA that, in effect, says that we will grant or allow dumping of sewage in a manner which is most economical to the community. That would not be good public

policy. There are other factors to consider including human health and environmental consequences and also the relative human health and environmental consequences of one disposal medium versus another.

So it is not our policy to give municipalities a permit to do things which are most economical to them. That may be a result of an action but that is clearly not our design or principal focus.

Mr. BATEMAN. Mr. Chairman, I certainly am not sitting here today indicating or charging what your policies are. I am the first to admit that I am unfamiliar with them. It becomes rather obvious that I am going to have to do a quick study and become familiar with them.

I guess I will let it go with my repetition of the request that I be able to submit further questions in writing.

Mr. D'AMOURS. Certainly. Without objection, that is so ordered. The Chair now recognizes for questions, Mr. Hughes.

Mr. HUGHES. Thank you, Mr. Chairman, and I welcome the panel and apologize that I was not here for your testimony in chief, but there was a simultaneous hearing in Judiciary.

First, let me ask you what are the EPA's present monitoring requirements for ocean dumping?

Mr. SCHATZOW. The specific requirements of monitoring are specified in the individual permits. I am not sure, Congressman, if we are talking about the site monitoring or the waste monitoring.

Mr. HUGHES. Site monitoring.

Mr. SCHATZOW. There are no regulatory requirements for site monitoring other than what are specified in the individual permits.

Mr. HUGHES. Do you have any idea of what changes have taken place, for instance in the last year at the 12 mile site?

Mr. SCHATZOW. As I was trying to differentiate, we have had historical monitoring programs as you are aware, conducted predominantly by NOAA, for instance, on the 12 mile site and EPA does its own monitoring of the 12 mile site in terms of the impacts. But that monitoring is not conducted by the dumpers themselves.

Mr. HUGHES. Do you know of any changes that have taken place at that particular dump site since you last testified here?

Mr. EIDNESS. If you don't mind, we have Dr. Peter Anderson from region II of EPA who is somewhat of an expert on the New York dump site issues and he can perhaps give you a better answer.

Dr. ANDERSON. Thank you.

For the record, my name is Peter W. Anderson. I am Chief of the Marine and Wetlands Protection Branch of region II in New York City.

In response to your question concerning monitoring, monitoring is done at the 12 mile site or for that matter any dump site in two ways, specified in part 228 of our regulations. One is with regard to Federal activities. As you know, NOAA and EPA and in some cases the Coast Guard do some monitoring specific to a dump site.

As well, whenever region II issues a permit—I am not aware of what goes on in the rest of the country each permit has a requirement under special condition 6 for the permittee to accomplish certain monitoring requirements.

The monitoring program to be carried out by the permittee is set up as part of the application and goes into the public hearing and review process. In the past, and we intend to do the same thing in the future, whenever we set up a permittee dump site monitoring program, we confer with the Marine Fisheries Service and the Office of Marine Pollution Assessment—

Mr. HUGHES. I only have 5 minutes.

Dr. ANDERSON. I'm sorry.

Mr. HUGHES. I just want to find out if there has been any change since you were here the last time.

Dr. ANDERSON. There has been no change in terms of what data is coming in. In terms of the permittee monitoring, and I have not heard from NOAA that there is any specific change that they have observed and I talked with them just last week.

Mr. HUGHES. Does sufficient baseline data exist to make realistic determinations of the impact of ocean dumping on marine environment, fishery resources and coastal waters?

Dr. ANDERSON. In terms of the New York Bight, sir?

Mr. HUGHES. Yes, sir.

Dr. ANDERSON. We always need and look for additional information.

Mr. HUGHES. Your answer is no?

Dr. ANDERSON. Partially no, yes, sir. I would always like to have more information.

Mr. HUGHES. Are you familiar with the New Jersey study recently completed by EPA which indicates that out of 52 species of seafood tested, 5 came up with fairly high levels of PCB's?

Dr. ANDERSON. Yes, sir, I have a copy of it.

Mr. HUGHES. Have you discussed the significance of that particular study with the officials?

Dr. ANDERSON. I have discussed it with the Director of the Fish, Game and Shellfish and also the head of the Marine Biology Department.

Mr. HUGHES. Does that study give you any concern?

Dr. ANDERSON. Sir, the study indicates that there are some elevated concentrations of PCB's in fish that are specific near shore. The State recognizes that there is a need for additional sampling of fish. The study itself is perhaps not conclusive and EPA is trying to help the State to get some additional moneys to support that study through our own *Antelope* vessel this summer in August and through a foundation; the Hudson River Foundation is supporting their efforts to get money through that foundation.

Mr. HUGHES. I see my 5 minutes are up. I trust you are going to have additional rounds?

Mr. D'AMOURS. Yes, sir, I made that statement earlier before you came. We will have additional rounds.

Mr. HUGHES. I want to follow up on that.

Mr. D'AMOURS. Thank you.

Mr. McKernan, do you have any questions?

Mr. McKERNAN. Yes, sir; thank you, Mr. Chairman.

Mr. Eidsness, during your case-by-case consideration of site designations and permit reviews, do you take into consideration the cumulative effect of other dumping activities or pollutants in the area as part of that consideration?

Mr. EIDSNESS. Well, yes, sir. I am going to have Dr. Davies give you a more technical response because he is really the competent scientist in that field. But as I understand it we would have to clearly make some determination as to the natural background levels of these various contaminants.

One might want to look for these in the marine environment to see whether the impact of dumping of various wastes and the contaminants which we monitor are causing any major fluctuations or variations. I think that gives an indication of the impact in the cumulative sense on the disposal of waste.

Dr. Davies, do you want to respond to that?

Dr. DAVIES. In the permit application one of the things that we consider is the characterization of the waste and the amount of the waste. We attempt, then, scientifically to project from that information concentration levels that might be achieved in seafood, et cetera, and obviously we are very concerned that we do not reach any unreasonable degradation level.

So we would consider, then, alternative sources of pollutants and also how much of a pollutant would be introduced for how long. That would be part of the consideration that we would use in permitting and operation.

Mr. MCKERNAN. Does the *New York* case have any impact on your ability to prove the reasonable degradation?

Mr. EIDSNESS. I am not sure I understand the question.

Mr. MCKERNAN. I wondered whether or not your ability to prove that that has been required as I understand it under that *New York* case, does that have any impact on considering the other pollutants?

Mr. EIDSNESS. Well, the most honest answer I can give you is that there is clearly a certain amount of predictability involved in determining the fate and effects of pollutants in the marine environment. There is no question of that. The better research, the more data we have, the better precision we have in making predictions but as the act itself recognizes, there is a certain amount of subjective decisionmaking that has to be made by someone in authority; the Administrator, based upon all facts presented and disclosed and debated in the public arena.

So, at some point in time, EPA is going to have to fish or cut bait with respect to such issues as permit applications or site designations and it will be a policy decision based upon the best scientific evidence and public information that we receive from the process.

Mr. MCKERNAN. Are there any types of waste that should not be disposed of in the ocean?

Mr. EIDSNESS. Yes, sir. In fact, as a matter of policy there are certain wastes that have been banned from disposal in the ocean under the terms of the London Dumping Convention except amounts rapidly rendered harmless, and we abide by annexes to the Convention which are binding upon us in that regard.

Dr. Davies, could you give some specific examples, if you would like?

Mr. MCKERNAN. Sure, briefly.

Dr. DAVIES. The two that are absolutely forbidden are high-level and low-level radioactive waste. As Mr. Eidsness said, we have con-

centration levels of materials that would be included in waste that we would find unacceptable for disposal.

Mr. MCKERNAN. Speaking of radioactive waste, is there any consideration being given that you know of by the Department of Energy to the 106 mile deepwater dump site for disposal of radioactively contaminated soils?

Mr. EIDSNESS. I am aware of the fact that they are studying ocean disposal as an alternative for disposal of contaminated soils resulting from the Manhattan project. I was not aware of the fact that they were looking at a particular site.

But I know that the Department of Energy has interests in their area and they are researching it as well as the Department of the Navy.

Mr. MCKERNAN. That would be radioactive soils?

Mr. EIDSNESS. Yes, sir, low-level radioactive waste.

Mr. MCKERNAN. How does that jibe with what you were just saying?

Mr. EIDSNESS. Let me clarify what I think Dr. Davies meant to say. The dumping convention bans the disposal of high level radioactive waste as defined by the International Atomic Energy Commission. Their definition of high level radioactive waste, is what we cannot dispose of and it is a worldwide ban.

Under U.S. domestic law there is a moratorium for disposal of low-level radioactive waste except for research purposes through, I believe January 6, 1985. After that time any disposal of low-level radioactive waste would have to be issued under a permit by the Administrator following the statutory test set forth in the law and subsequently approved by both the House and the Senate of the United States.

Mr. MCKERNAN. So before any radioactive waste could be disposed of, it would be subject to approval by the House and the Senate?

Mr. EIDSNESS. That is correct.

Mr. D'AMOURS. Thank you, Mr. McKernan.

We will now begin a second round of questioning for EPA. I would like to followup on what I asked you about and what Mr. Forsythe asked you about in the first round. In response to Mr. Forsythe's question on the 106 mile site, you mentioned a date of May 2.

Now I want to be sure I am clear on that. You are not indicating there will be a designation by May 2, are you? That is really the end of a comment period?

Mr. SCHATZOW. I think what we indicated was that the comment period on the designation of the 106 mile site expired on February 18, that we had requested additional information from the municipalities and authorities that are presently dumping at the 12 mile site and that we had given them until May 2 to give us that additional information.

Mr. D'AMOURS. Well, when would the 106 mile site be designated if it is going to be designated?

Mr. SCHATZOW. I think I said earlier about 3 months from now. I think that is what our testimony states.

Mr. D'AMOURS. Exactly how far behind schedule are you in the designation process and in meeting the various schedules that you

yourself have set and that you are bound to meet now under court order?

Mr. SCHATZOW. I don't have the details on that. We are somewhat behind in terms of the schedules both in the court order and the schedules that we had previously submitted to this committee. But we have made, I think some dramatic progress within the last year. We have, as I think we stated in our testimony, completed 12 draft EIS's and 6 final EIS's within the last year.

We have made very significant progress and we have some hopes that with the protocol workshop that we held recently in Rhode Island that we are going to be able to expedite the process even more rapidly in the future.

Mr. D'AMOURS. But we have no way of knowing now when we might expect a number of sites to be designated?

Mr. SCHATZOW. We have a schedule which I would be very happy to submit for the record.

Mr. D'AMOURS. Is this a recent schedule or the old schedule?

Mr. SCHATZOW. It is a recent schedule.

Mr. D'AMOURS. How recent?

Mr. SCHATZOW. The 19th of February.

Mr. D'AMOURS. This is a schedule that was published on the 19th of February?

Mr. SCHATZOW. It was prepared on the 19th of February. I don't believe it has actually been published.

Mr. D'AMOURS. Would you submit it for the record, please?

Mr. SCHATZOW. I would be happy to.

[The information follows:]

PROJECTED OCEAN DUMPING EIS SCHEDULE (as of 2-19-83)

Site	Draft	Final
**New York 106 Mile	6-25-79*	2-27-80*
**New York Acid	11-27-79*	12-01-80*
**Hawaii	10-20-79*	9-30-80*
North Atlantic Incineration	12-29-80*	12-18-81*
**Vieques, Puerto Rico	6-19-81*	12-18-81*
**San Francisco Channel Bar	2-26-82*	3-10-83*
**New York Mud Dump	2-19-82*	3-03-82*
**New York Cellar Dirt	3-26-82*	3-24-82*
**Jacksonville, Fla.	5-14-82*	11-14-82*
**San Juan, Puerto Rico	8-13-82*	2-4-83*
**Galveston, Texas	7-30-82*	11-26-82*
**Columbia River	10-15-82*	5-83
**Portland, Maine	10-15-82*	4-83
**Tampa, Fla.	10-29-82*	7-83
**Sabine-Neches, Texas & Louisiana	8-20-82*	5-83
**Wilmington-Charleston-Savannah	10-08-82*	8-83
**Pensacola-Mobile-Gulfport	1-21-83*	9-83
**New Jersey-Long Island Inlets	6-83	1-84
**Long Beach	1-84	10-84
**Coos Bay	8-83	5-84
**Humboldt Bay	12-83	6-84
**San Diego	2-84	11-84
**San Francisco 100 Fathom	De-Designated	
Calcasieu Bar	10-83	5-84
Atchafalaya	10-83	5-84
Houma	10-83	5-84
Barataria Bay	10-83	5-84
S.W. Pass Mississippi River	10-83	5-84
Mississippi River Gulf Outlet	10-83	5-84

* Actual date

** Being prepared pursuant to settlement agreement in NWF v. Costle

Mr. D'AMOURS. Mr. Eidsness, under the new regulations that you are promulgating under the *Sofaer* decision, would you elaborate so that the record will be a little more clear as to how you plan to weigh what you call "technical feasibility" and also would you elaborate on what you, in your written testimony called "cost of waste disposal alternatives"? How are you going to weigh those aspects?

Mr. EIDSNESS. Well, I would be very happy to respond in a rather conceptual way. To go any further I might be preempting our own internal decisionmaking process. But let me put it this way.

For certain wastes that we know a lot about in terms of the waste characteristics as well as their impact on the ocean, in a very general sense we might require less of a burden of showing for a particular applicant for ocean disposal, particularly such as in the case of uncontaminated dredge spoil, there is a considerable body of data and study that supports ocean disposal as a viable alternative under the right site-specific conditions.

Whereas, on the other end of the spectrum where there are wastes that we know little or nothing about, nor their impact on the ocean, the burden of proof would be substantially greater on the applicant in terms of the technological analysis, the cost impacts and the human health and environmental implications of that disposal method relative to the alternative land base disposal sites.

So in some cases the ocean might be a better alternative; wastes that we know a lot about and there seems to be a body of data and scientific research to support the disposal of that waste under the right conditions, whereas other waste that we know very little about we would take a more cautious approach to the amount of research and analysis that would attend that decision which would increase correspondingly.

Mr. D'AMOURS. My time is expired and I will be pleased to recognize Mr. Forsythe.

Mr. FORSYTHE. Thank you, Mr. Chairman.

Dr. Anderson, Mr. Hughes referred to the DEP study in New Jersey. I am aware of it and greatly concerned about any PCB contamination of marine life, particularly in shore water.

Could you tell me what the source of PCB's might be? Would it be connected in any way with sludge disposal at the 12 mile site?

Dr. ANDERSON. Well, Mr. Forsythe, PCB's are pretty well ubiquitous in the Hudson estuary and the inner bight apex and come primarily from sources of discharges into the harbor that are continuing but are diminishing in load because EPA has now banned PCB manufacture but they still are in the environment and coming through municipal plants.

Because they are in the harbor, of course they are also in the dredged material which is disposed of at the mud site in the bight apex. As well, because they are in the sewage system they would be in the sewerage sludges and they are there. I have seen some estimates from NOAA and I have no way of verifying them that in terms of dumping dredged material contains about 60 percent as compared to sewage sludge, contains about 40 percent of the total load.

But I would add that I would be looking toward the availability of that PCB as to whether it could get into the fish system. Dredged material tends to pile up in mounds and we are working with the corps to clean material on the contaminated material to keep it out of the water environment.

So that in any assessment of the New York Bight apex, I would consider the various sources, as being mainly from the dumping activities and the inputs from the Hudson River itself.

Mr. FORSYTHE. Rather than what is dredged out of the river? Every time they dredge, they are really stirring up a bunch of problems since you contaminate the river waters.

Dr. ANDERSON. That is correct.

Mr. FORSYTHE. I think that we must be very conscious of the research going on. Hopefully we have all the layers working together; EPA, the Corps, and the State.

Has the EPA received any comments from the National Marine Fisheries Service concerning the impact on fishery resources of sludge dumping at the 12 mile site? If so, can you submit it to us for the record?

Dr. ANDERSON. Mr. Forsythe, to my knowledge we haven't received it as yet although I know that a document has been prepared and is working its way up for signatures.

The last time I looked at the record was last week and I could only say that as soon as we receive it we will be happy to provide a copy to you.

Mr. FORSYTHE. I appreciate that very much.

I would like to go back and discuss the EIS situation a bit.

Mr. Eidsness indicated that what is being done now is essentially based on a policy determination by a former Administrator.

Is there any feeling that maybe this is an inhibition to meeting the information needs and having full public disclosure?

Mr. EIDSNESS. That is a good question.

The principle that I have adopted is that the more costly or controversial a particular regulatory decision, the better founded it must be and the more thorough the scientific information, debate, public involvement, and public disclosure must be. Certainly there are instances where going through a very protracted process of environmental studies in the broadest sense in hearings may not be necessarily appropriate.

As a matter of fact, it could be counterproductive. For example, if we had to do a research under the current Marine Protection Act for a low-level radioactive waste which is provided under the current amendments to go through a long protracted site designation process for purposes of limited research would be extremely counterproductive, in my view.

So we have a need for flexibility in designating interim sites and we have a limited use of the marine environment for specific interim purposes as opposed to site designation where we tend to have long-term disposal of large volumes of waste which probably ought to have a more expansive environmental analysis and public disclosure process.

Mr. FORSYTHE. My time is expired. I will have to follow up on that another time.

Mr. D'AMOURS. Thank you.

Mr. HUGHES [presiding]. The gentlewoman from California is recognized for 5 minutes.

Mrs. BOXER. Thank you, Mr. Chairman.

Mr. Eidsness, would you support legislation to enact criminal penalties for persons or companies which knowingly falsified data relating to tests of material which is proposed for ocean dumping?

Mr. EIDSNESS. Mrs. Boxer, I just heard that for the first time this morning. To be honest with you, not knowing any more than the question I could not give you an answer. I would have to see what that legislation said and how it would be implemented.

The concept of some kind of a penalty for falsifying data and information I think is a very sound concept but how it is applied and how it is written into law I would have to see the specifics.

Mrs. BOXER. My question is of a general nature. I am not putting forward any specific legislation but I am saying in general would EPA support criminal penalties for persons who knowingly falsified the data?

Mr. EIDSNESS. I can't even go that far.

Mrs. BOXER. Well, you just said you could go that far a minute ago.

Mr. EIDSNESS. Well, the idea of a penalty I didn't say a criminal penalty, some form of a penalty makes some sense but when you look at it from a purely technical point of view there may be in some cases a fine line between what is falsified and what is simply an error and I think we ought to not have a law which places every laboratory technician under immediate suspicion of having falsified data just because of the sensitivity of the equipment and all the potential uncertainties.

But in a general sense I think some sort of a prohibition against falsifying makes some sense.

Mrs. BOXER. I am not talking about mistakes. I am talking about knowingly falsifying the data.

Would you support a more effective quality control program to make sure that tests which are conducted are accurate?

Mr. EIDSNESS. I always support quality control and quality assurance to be sure that the results of tests are accurate. Now, whether that is legislative or not, once again it gets down to the specifics.

Mrs. BOXER. I am just asking you general questions. I am not asking for specific support of legislation.

Do you know if a proposal is being formulated by EPA, DOE, or DOD to amend the Ocean Dumping Act to exempt Federal agencies from the existing radioactive waste provisions in section 104?

Mr. EIDSNESS. I am not aware of any discussion on that issue at all.

Mrs. BOXER. Would you oppose the formation of such regulation?

Mr. EIDSNESS. Of regulations or amendments to the act?

Mrs. BOXER. Such an amendment to exempt Federal agencies from the existing radioactive waste provisions of section 104.

Mr. EIDSNESS. I think it would be inappropriate for me to comment on that because this is an issue which is clearly one that should be taken by the administration and after adequate internal agency review.

I think in a general conceptual way, though, that certainly under the Clean Water Act, for example, Federal agencies ought to be

regulated like anybody else with certain exceptions, such as instances that relate to national defense or emergency where there ought to be some flexibility for obvious reasons.

But I can't give you a definite yes or no on that question. I am sorry, I have to duck it.

Mrs. BOXER. Well, you are not really ducking it. You said you could see it happening if it had to do with the Department of Defense.

Mr. EIDSNESS. No, I said under the Clean Water Act, for example, there there are provisions that would allow for waiver from certain kinds of statutory obligations in times of national defense or national emergency and I think these kinds of things are appropriate.

But a blanket waiver of Federal agencies to comply with environmental regulations would certainly be inconsistent with all the other statutes I am familiar with.

Mrs. BOXER. Is EPA considering regulations which would rescind a prohibition against the dumping substances known to be carcinogenic in the ocean?

Mr. EIDSNESS. Would you repeat the question?

Mrs. BOXER. Which would rescind an existing prohibition against dumping substances known to be carcinogenic into the ocean?

Mr. EIDSNESS. I think the answer is yes and no, and I am sort of reaching out for an understanding of the issue. This is something that is undergoing review as it relates to what I referred to earlier in my testimony as EPA is going forward to amend the ocean dumping regulations to comport with the *Sofaer* decision.

My understanding is, and once again it is subject to review and policy decisions that have not been made, is that EPA cannot conclusively prohibit the disposal of waste in the ocean simply on the basis that the environmental criteria have not been satisfied.

And in that context there may be some indirect implication on carcinogenic materials but beyond that I can't tell you that there is a decision or a policy involved here at all that has been considered in any major way.

Mrs. BOXER. Well, your answer is a little disturbing. Either yes or no. Are you considering reversing position on it?

Mr. EIDSNESS. What we are doing is trying to write a regulation that comports with the *Sofaer* decision. The best answer and the right answer is I do not know what the implication of comporting with the *Sofaer* decision has on the disposal of carcinogenic materials in the ocean.

I just don't know what the implication is.

Mrs. BOXER. So your first answer which was yes and no is now replaced with the answer that you don't know?

I am serious, I am trying to find an answer. It is difficult to get answers.

Mr. EIDSNESS. Well, it is a very complex subject and I guess the answer is that the second answer was a more accurate one.

Mrs. BOXER. Thank you very much, Mr. Chairman.

Mr. HUGHES. The gentleman from Virginia is recognized for 5 minutes.

Mr. BATEMAN. If I may, would you tell me whether or not there is any ongoing research effort with reference to sludge from our sewage treatment facilities and how we might turn it into asset as

opposed to liability or is that in the ball park that you gentlemen play?

Mr. EIDSNESS. I am going to turn the question over to Dave Davis. I don't know whether there is active research. I think I indicated earlier we would supply that information for the record but there has been a considerable amount of completed and probably ongoing research sponsored by others in the Federal Government perhaps dealing with this issue.

Dave, could you give a good answer?

Mr. DAVIS. Congressman, I think it is best if we provide more detailed response in a followup answer. But in general, yes, there is research going on, some in EPA, some in the Department of Agriculture and elsewhere looking at means to render sludge more useful from the standpoint of economic and other benefits.

We know that it doesn't always have to be a material that is treated strictly as waste. It does have considerable value primarily in the area of agricultural and other land applications, so, yes, there is research going on. There is also research, as Mrs. Schneider pointed out earlier, in turning sludge into construction materials, for example.

The Eco Rock project is an example of that. So, yes, there is such research.

[The following was received for the record:]

ORD SUPPORT RELATED TO MUNICIPAL SLUDGE MANAGEMENT

The EPA Office of Research and Development has always played an important role in supporting the Agency's program offices in the area of municipal sludge management. In addition to providing technical assistance to the Sludge Task Force and the Agency as a whole on sludge management issues, ORD's research laboratories are currently supporting intramural or extramural research and technical evaluation efforts in a wide range of areas that are programmed to generate outputs over the next few years in such areas as the following:

Ocean Disposal

- o Procedures to predict and assess impacts associated with ocean disposal of sewage sludge
 - development of hazard assessment protocols to assist in both effects and exposure assessments
 - development of dump site monitoring protocols
 - development of dump site characterization procedures

Landfilling

- o Evaluation of leachates from sludge disposal landfills
 - study leachate from lysimeters for metals and organics, and evaluate captured gas for BTU value and generation rates

Land Application

- o State-of-the-Art Workshop (Denver) and Land Application Process Design Manual
 - issuance of a current State-of-the-Art evaluation and summary of research findings over the past 10 years in the form of a workshop proceedings resulting from an interagency sponsored meeting held in Denver, CO on 23-25 February 1983
 - issuance of a new EPA Land Application of Municipal Sludge Process Design Manual covering agricultural use, application to forests, use in reclamation of disturbed lands, and dedicated high rate sludge disposal systems
- o Completion of major land application demonstration and research efforts
 - wrap-up of the Ohio Farm Bureau Project and the Pennsylvania Reclamation Program
 - further evaluation of parasite and virus survival in land application systems
 - issuance of an assessment of health risks associated with land application of sewage sludge

Thermal Conversion (Incineration)

- o State-of-the-Art Conference and Engineering Assessment of Thermal Conversion technologies
 - issuance of a current State-of-the-Art review and engineering assessment in the form of a conference proceedings resulting from an EPA/ORD sponsored international conference held in Hartford, CT on 22-24 March 1983

- o Analysis of design and operational problems in existing heat treatment and incineration projects
 - preparation of design guidance for problem assessment of thermal processes to help improve system design, save on capital costs, and improve energy efficiency and emissions controls
 - develop better information on upgrading existing incineration facilities
 - provide a better mass balance of metals for sludge incinerators

Other (General)

- o Documentation for estimating sludge management costs
- o Assessment of new and innovative sludge conversion and volume reduction processes, including gassification, liquification, advanced digestion techniques, etc.
- o Assessment of cause and remedies for sludge handling problems, including process design and operations
- o Improving the design of facilities to handle anaerobic digester side streams
- o Issuance of a new EPA septage management handbook
- o Completion of on-going and new composting studies
 - determining optimum conditions for composting
 - evaluation of shredded tires as bulking agents
 - effect of composted sludge on pathogens
 - evaluation of in-vessel composting systems
- o Evaluation of parasite and virus survival in sludge lagoons

Mr. BATEMAN. In the area of ocean dumping where a permit has been granted for dumping, I assume the permit has certain limits in it, thou shalt not dump certain things. What sort of monitoring is done to assure that those certain things are not dumped in violation of the permit?

Dr. ANDERSON. There are several ways of looking at it. One of them is in terms of whether the vessel gets into the dump site and dumps its waste in the pattern specified in the permit. The Coast Guard does provide some surveillance to that by vessel or by aircraft.

We also put within the permit a requirement that the master of the vessel, the captain, et cetera, is to provide the Coast Guard with an overlay of the local navigational map showing where the vessel was at specific times. If, in fact, he is caught in violation or falsifying this information he can have his papers lifted by the Coast Guard.

Mr. BATEMAN. That relates to the geographic area where the dumping takes place. But my question goes largely to whether or not there is any monitoring or enforcement activities to determine if something is being dumped perhaps in a place that has been designated as a dump site but which is other than that which is authorized to have been dumped.

Dr. ANDERSON. There is, as well, Congressman, a permit provision to require self-monitoring by the dumper providing us with that data. Also, EPA's staff has gone out and sampled for ourselves to check to see whether the constituents in the waste are as proposed in the permit or the application.

And on one occasion I know that we found out that it wasn't and there was a penalty assessed for that.

Mr. BATEMAN. So there are reporting requirements and self-monitoring, as you describe it, and some at least minimal spot checking that goes on to assure compliance?

Dr. ANDERSON. Yes, sir. I wouldn't wish to say that we go out every day. It is rather random.

Mr. BATEMAN. You made reference to one instance where there was unauthorized material being dumped. Is there only one such instance?

Dr. ANDERSON. There is only one that I am aware of, sir, and I have worked in the region since 1974.

Mr. BATEMAN. Do you feel somewhat sanguine or not sanguine at all that one is the only one or is it indicative that perhaps there are many instances?

Dr. ANDERSON. Well, I think that we could improve our—there is always an ability of a waste transporter or somebody to put materials in a barge that we are unaware of. We do get allegations that that happens. When we do, we try to check it out.

There is only one time, as I say, that we actually caught someone.

Mr. BATEMAN. Is there a need for funding and more activity in terms of compliance and enforcement?

Dr. ANDERSON. I refer that to my colleague.

Mr. EIDNESS. The best answer, Congressman, is that I don't know the answer but one of the things we are doing as part of my initiative to try to improve EPA's administration of this act is to

develop a marine strategy which Dr. Davies is principally responsible for right now. I should be seeing a copy in the next few weeks in draft form and this strategy will address, among other things, the institutional linkages that we have of Federal agencies and such things as enforcement. This should help me determine whether we need to do more or not.

Mr. BATEMAN. Thank you, Mr. Chairman.

Mr. HUGHES. The time has expired.

Let me turn the chair back to the chairman and I will resume my questioning.

The Chair recognizes myself for 5 minutes.

Mr. D'AMOURS. Without objection.

Mr. HUGHES. First of all, anyone on the panel, is the 12 mile site unreasonably degraded at present? Anybody?

Dr. ANDERSON. I think, sir, it would be called degraded and maybe substantially degraded. Whether it is unreasonable we are in the process of asking the public and everybody else to provide us the information so that we can make a determination of whether the site should be redesignated or not.

Mr. HUGHES. I am not sure whether that is a yes or no, Doctor? Is it unreasonably degraded or is it not unreasonably degraded?

Dr. ANDERSON. I would say that I couldn't know right now because we don't have the full—

Mr. EIDSNESS. Let me get this gentleman off the hot seat.

Mr. HUGHES. You don't know whether the most distressed body of water in the world is unreasonably degraded?

Mr. EIDSNESS. The legal context, the answer is we haven't made that determination. That is a policy determination that is made under rulemaking. In the scientific vein I am not competent to answer that.

Mr. HUGHES. You probably said more in that statement than anything you can say. Because if that isn't unreasonably degraded then I don't know what can unreasonably degrade any body of water. We have had scientists in here including you, Dr. Anderson, who have described the New York Bight in pretty dramatic terms as being the most distressed body of water in the world.

If New York City, for the first time, applied for a permit right now, given the condition of the New York Bight, would you grant it?

Mr. EIDSNESS. If they met the requirements of the statute. I understand your frustration, Congressman. The situation that I am in here is having to state that because of the statutory test being one of determination or a finding of no unreasonable degradation if I made a statement that I felt there was unreasonable degradation that would preempt due process of rulemaking under Federal process and I cannot do that.

Mr. HUGHES. On a scientific basis. I am not talking about anything else. I am asking you scientifically, right now, if New York City were not dumping and they applied to you folks who are in charge of cleaning up the environment, would you grant New York City a permit to dump at that location?

Mr. EIDSNESS. Once again, and this will be an unsatisfactory answer, if they meet the requirements of a statute and I think you heard Dr. Anderson say that he thought it was significantly de-

graded and clearly the word "significant," substantially or all words which have a certain amount of value judgment involved in them. That is where the Marine Protection Act is constructed the way that it is so that decisions that require some subjective component based upon the best facts are made in a public process of public comment and notice of rulemaking.

Mr. HUGHES. Are you familiar with New York sludge? Do you know—

Mr. EIDSNESS. Yes, I have seen it.

Mr. HUGHES. You know what quality it is, how much mercury, cadmium, and PCB's, and you know the general condition of the sludge in New York at the present time?

Mr. EIDSNESS. I have a general knowledge of it; yes, sir.

Mr. HUGHES. I assume that is one of the things you monitor from time to time to determine the nature of the sludge that is being dumped in the New York Bight. Isn't that your responsibility?

Mr. EIDSNESS. That is correct.

Mr. HUGHES. I have to assume that you know what is in the sludge at any given time?

Mr. EIDSNESS. We know what the characteristics of the sludge are because of the burden on the applicant to do an analysis of that so that we know what the sludge is that they are proposing to dump, yes.

Mr. HUGHES. Let me ask you again. Scientifically, since you know the characteristics of the sludge, and given the fact that we have determined that it is a distressed body of water, given the fact that New York is applying for the first time, would they meet your criteria for dumping in the New York Bight?

Mr. EIDSNESS. I am going to have to repeat myself.

Mr. HUGHES. Don't do that. We will save some time. The answer is again you don't know?

Let me ask you, at the Mid-Atlantic Bight sewage dump site researchers from PHS, NOAA, and your EPA found an area of over 450 square miles of ocean bottom to be contaminated with serious health disease indicated microorganisms, streptococcus, pathogenic amoebae, et cetera.

They also found that these human disease organisms were still being recovered from the dump site 7 months after the ocean dumping at the site ceased in November 1980. We have closed a major clam fishery between \$4.9 and \$5.2 million annually.

Can you tell me if you have found similar studies in the New York Bight area?

Dr. ANDERSON. Yes, we have.

Mr. HUGHES. What does that suggest about the shellfish and fin fish that are found in that area?

Dr. ANDERSON. As you know, Congressman, the entire area of the inner bight apex has been closed not only because the sewerage sludge pathogen bacteria and contamination but also influence from the harbor itself.

Mr. HUGHES. My time is up but my question is what does that mean about the shellfish and the fin fish in the area? Does it mean that my commercial fisheries are on dangerous ground for harvesting seafood in that area?

Dr. ANDERSON. Well, we know that there are diseased fish and bacterial contamination of shellfish and these are resulting from a multitude of sources and we have to make a determination as to whether that site should continue or not.

That is what we are in the process of doing.

Mr. HUGHES. Well, my time is up again.

Mr. D'AMOURS. The gentleman's time has expired but we will, be getting back to him for further questions if he so desires.

Mrs. SCHNEIDER?

Mrs. SCHNEIDER. Thank you.

EPA has issued a special permit for incineration of PCB's at the Gulf incineration site. Is that correct?

Mr. EIDSNES. No; that is not correct.

Mrs. SCHNEIDER. What is the status of the proposal to issue a permit there or what are the plans for issuing a permit there?

Mr. EIDSNES. Steve, would you answer that question, please?

Mr. SCHATZOW. We have received what are, in essence, three separate permit applications for mixed organohalogens, for PCB's and for DDT.

Mrs. SCHNEIDER. Are you looking at those three permits as one permit or are you looking at them each individually?

Mr. SCHATZOW. We are now looking at them individually.

Mrs. SCHNEIDER. I see.

Evidently there was at one point a speedy permit that was written for the Chemical Waste Manufacturing Co.; is that not correct?

Mr. SCHATZOW. A speedy permit that was written?

Mrs. SCHNEIDER. Yes, a research permit.

Mr. SCHATZOW. There was a research permit that was issued for PCB's. That permit has expired. The results are in and it is on the basis of those research results that we are going to make a determination as to whether a special permit should be issued to include PCB's.

Mrs. SCHNEIDER. I see.

When was the research permit granted, approximately?

Mr. SCHATZOW. There were two burns under the research permit and they took place, I believe, in December 1981 and August 1982 and I am going to guess that the permit was actually issued perhaps November 1981.

Mrs. SCHNEIDER. And who prepared that research permit?

Mr. SCHATZOW. The research permit was prepared by the staff in that Marine Protection Branch of EPA in consultation with staff within the Office of Water and the Office of Research and Development.

Mrs. SCHNEIDER. It is my understanding that Chemical Waste Management was paid \$300,000 to prepare that research permit themselves.

Mr. SCHATZOW. No; Chemical Waste Management was never paid anything to prepare anything by EPA. I think you are referring to a somewhat different matter which was the question of the monitoring and sampling and analysis on the second burn.

I think the issue that has been raised was who paid for the sampling and analysis that was conducted on the second research burn. EPA paid for the sampling and analysis conducted on the second research burn. We did not pay Chemical Waste Management to uti-

lize our own research and our own contractors to conduct the research. There is no payment from EPA to them.

Mrs. SCHNEIDER. And you have no accounting of EPA paying \$300,000 to Chemical Waste Management for anything whether it be a second research permit or analysis?

Mr. SCHATZOW. No; do you have some accounting for that?

Mrs. SCHNEIDER. I have some information that I would like to pursue further.

Mr. SCHATZOW. I would be happy to pursue it.

Mrs. SCHNEIDER. Good.

Is the EPA making an effort to tighten up now some of their land-based incineration operations?

Mr. SCHATZOW. You mean at sea or land-based?

Mrs. SCHNEIDER. Land-based.

Mr. SCHATZOW. Well, we are not specifically responsible for the land-based incineration program that is handled under RCRA. I think the mechanism that we are planning to use for permitting mixed waste under at-sea incineration is similar to the mechanism that is now being used for land-based incineration which is the use of an index of incinerability.

Mrs. SCHNEIDER. If you were to give your own scientific analysis of what is happening now at EPA insofar as loosening or tightening the sea-based incineration, how would you characterize that? Is it getting tighter or looser than previously?

Mr. SCHATZOW. It is getting tighter. I think that is pretty clear.

Mrs. SCHNEIDER. That concludes my questioning, Mr. Chairman. Thank you very much.

Mr. D'AMOURS. Mr. Carper.

Mr. CARPER. Thank you, Mr. Chairman.

I would like to follow up on the gentlelady from Rhode Island's question regarding incineration at sea. I know very little about it. I understand there is a North Atlantic incineration site that is designated; is that correct?

Mr. EIDSSNESS. It has been proposed as a designated site.

Mr. CARPER. Where would that site be located, please?

Mr. SCHATZOW. It is about 125 miles off the coast. It is 20 or 30 miles southeast of the 106 mile site. We are going to be having a public hearing on the question of the designation of that site which will be held in Ocean City, Md., I believe, on April 14.

Mr. CARPER. Say the date again, please?

Mr. SCHATZOW. April 14.

Mr. CARPER. Currently is any burning of hazardous material done at sea? Are you saying that this would be a first given the designation of this site?

Mr. SCHATZOW. No. There is a site in the Gulf of Mexico which is approximately 177 miles east of Brownsville, Tex. which has been a designated site for at-sea incineration of hazardous waste and that site has been used under a number of different permits since 1975.

Mr. CARPER. From what ports points would liquid hazardous materials which could be burned at the perspective site off of the coast of Maryland, be shipped, any idea?

Mr. SCHATZOW. No. Some sort of port storage facilities would obviously have to be developed before that site could be utilized.

Mr. CARPER. Do they currently exist up and down the east coast?

Mr. SCHATZOW. I am not aware that any fully developed port sites exist at this time in terms of storage and transport.

Mr. EIDNESS. If I understand correctly, the Resource Conservation and Recovery Act has regulatory provisions that govern the storage handling and transport of hazardous waste.

Clearly whatever is going to happen, if anything ever happens in this area insofar as EPA issuing permits for burning of organohalogenes at sea in the Atlantic Ocean, whatever the regulatory requirements are they will have to be met under the Resource Conservation and Recovery Act.

Similarly to the discussion we had about designating sites versus issuing permits, EPA designates sites through rulemaking but we also issue permits as an independent activity that we have to conduct. So even if we did finalize a site for incineration at-sea purposes in the Atlantic no burning would be permitted unless and until a permit has been satisfactorily sought by the applicant.

Mr. CARPER. I see.

Thank you.

Following up, if I could, on some questioning on the proposed 106 mile site redesignation. I understood from your earlier comments that certain materials, I believe they were called industrial wastes, are already disposed of there.

Could you just take a moment and talk about the nature of those materials? What are we talking about there?

Dr. ANDERSON. Are you talking about what is currently there or what has been dumped there since 1961?

Mr. CARPER. Currently.

Dr. ANDERSON. Currently there are two permits issued for industrial waste. One is from Du Pont in Delaware to dump the residuals from waste from their titanium manufacture. In actuality they have a recycling facility now pretty much marketing and reusing that and not dumping but they have a permit through the end of this year.

The other is a plant in Linden, N.J., also a Du Pont plant which is a basic solution, sodium hydroxide and sodium sulphate with a trace quantity of phenol and that is dumped there.

The other materials that are dumped there are digest or clean-out materials which is about every 2 years and the municipality will clean out its sewerage sludge digesters and we require that this material be dumped at the 106 mile site for those that are permitted to use the 12 mile site.

Mr. CARPER. So as I understand it, there are two permits now held by the Du Pont Co. and one of those is currently not being used and will expire at the end of this calendar year.

Dr. ANDERSON. That is correct.

Mr. CARPER. The other is being used?

Dr. ANDERSON. That is correct.

Mr. CARPER. And would you say that the dumping of those materials if you look at all of it in the aggregate, including the indigestibles, is going to be increasing or decreasing?

Dr. ANDERSON. The quantity of industrial wastes at the 106 mile site is decreasing, the quantity of digester material varies up and down by year but it has been pretty constant.

Mr. CARPER. My time has expired. Thank you.

Mr. D'AMOURS. Mr. Eidsness, getting back to where I was when my time expired a little bit ago, I asked you about how you plan to weigh technical feasibility as opposed to cost of alternative disposal. I would like to get into that a little bit more deeply.

I understand Mrs. Boxer had a few questions on that when I was unavoidably out of the room.

Mr. Kamlet, in his testimony for the National Wildlife Federation, is going to say later on that a Wildlife Federation analysis of a January 13, 1983, version of EPA proposed regs indicates that by removing the conclusive presumption concerning materials which fail the environmental impact criteria, EPA will actually allow proposals to dump cancer-causing agents to be subject to a balancing test.

Would you please comment on that specifically and say how in that case you would do it?

Mr. EIDSNESS. This was the issue that Mrs. Boxer raised and that is why I was fumbling so much because I knew there was some relationship direct or indirect concerning the *Sofaer* decision and how that might affect agency decisionmaking with respect to cancer-causing agents and whether or not and under what conditions they would be permitted to be disposed of in the ocean.

I just don't have an answer because we have not really focused on that policy issue and it is a significant policy issue.

We really have not focused on that issue although there are draft proposed regulations that the program has prepared under Steve Schatzow's direction that I understand do have some discussion in the preamble regarding that. I guess what I would want to understand as one who affects policy decisions in the Agency is that assuming there are circumstances under which carcinogenic materials may get into the waste or are in the waste, do those materials have any potential for public health implications?

I think that is the question we ought to focus on.

Mr. D'AMOURS. Let me read from the proposed regulation that we are referring to, and this is not a preamble. This is a proposed regulation 40 CFR, section 227.6, and I am quoting now from that proposed regulation:

The existing regulations had prohibited the ocean disposal of known or suspected carcinogens, mutagens, or teratogens other than as trace contaminants. This provision, however, is not required by the London Dumping Convention or the Act. Therefore, under the *City of New York* decision;

The so-called *Sofaer* decision I interject—

under the *City of New York* decision, these materials cannot be flatly prohibited or banned above trace contaminant levels, but rather must undergo the balancing requirements of section 227.2 and 227.3.

So, it would appear that the decision has been made that there will be a balancing of technical feasibility versus cost of waste disposal alternatives, would it not appear?

Mr. EIDSNESS. Well, to the extent that that language comports with the *Sofaer* decision and I am not competent to answer that, that is an answer that has got to come from EPA's legal counsel, that would be a correct reading. But this draft that you are referring to is a draft prepared in the program and I am not disavowing its existence. It clearly exists and there have been several drafts

proposed, one which has not gone through intra-agency review or review by our legal counsel.

In a practical sense, however, if language to this effect did find its way in the preamble language to a proposed regulation to modify the current regulation based on my own thinking about how that should be implemented considering how little we may know about the effects of those carcinogens as it relates to human health or the fact that they are carcinogenic to begin with suggests that the burden would be great upon the applicant to demonstrate that there are no feasible, environmentally sound land based alternatives to ocean disposal.

Mr. D'AMOURS. But if he did so demonstrate you would then—

Mr. EIDSNESS. Well, only if, in the final analysis, the demonstration also proved that the disposal of that waste would not result in unreasonable degradation of the marine environment and, of course, that gets you back to the criteria that we have to look at under the Marine Protection Act in our regulations and that rule-making process where ultimately a decision is made by the responsible EPA official.

Mr. D'AMOURS. So you are back to where you began because the *Sofaer* decision used the alternative disposal question as a way of determining unreasonable degradation.

While you are here to respond to it, let me call something to your attention that Mr. Kamlet is going to call to our attention a little later. He quotes from the *Sofaer* decision thusly on page 10 of his testimony:

Nothing in the act requires that EPA engage in a comprehensive balancing of the factors in deciding every permit application. The notion that some applications may be denied solely because of the projected environmental impact of substances to be dumped might be justified in light of the act's purposes.

Now given that quote from the *Sofaer* decision, I would strongly admonish EPA and its legal staff to consider *Sofaer's* decision perhaps a little more carefully than they did and I would hope to recognize that where carcinogens are involved that they don't have to put a price tag on it and under *Sofaer's* own words, they don't have to allow that dumping to be done in the ocean regardless of what the cost of the alternative waste disposal may be shown to be.

Mr. EIDSNESS. Well, in my own mind I would not be juxtaposing costs versus risk. In my mind I would be juxtaposing human health risks of land-based alternatives versus human health risks of ocean disposal. That is where I think the focus ought to be and Mr. Chairman, I sincerely appreciate the concern you have expressed and Congresswoman Boxer and others about this issue and do want your advice and counsel and I am happy to be receiving it today but this particular document you are referring to is not something which I have forwarded up for intra-agency review under our red border review steering committee process nor is it one which has received the personal attention of EPA's general counsel.

And I assure you having said what you said we will go back and look at Mr. Kamlet's testimony which I just received about an hour ago and I have not yet had an opportunity to read.

Mr. D'AMOURS. All I am quoting from Mr. Kamlet's testimony is the *Sofaer* decision which has been around for some time and

which the EPA legal staff, one can assume, has had access to and some understanding of it.

Mr. EIDNESS. Can I please reassure all of you that there has been very little attention on this particular aspect of the ocean dumping regulations to date by me, the responsible official within EPA for developing the proposed changes to those regulations. I do plan to focus on it now that you have raised the issue.

I had planned to anyway, its just that of all the things I have been focusing on, this has been relatively minor but that does not mean it is a minor issue. It is clearly a very important issue.

Mr. D'AMOURS. I appreciate that. Mr. Forsythe, do you have any further questions?

Mr. FORSYTHE. Mr. Chairman, I think just one more. Mr. Anderson probably is best equipped to answer. I am concerned about the review of the 106 mile site because of concern that there are substantial numbers of fish out in that area which may be impacted. Are NMFS and EPA coordinating to make sure that those bases are touched; at both 106 and 60 mile site?

Dr. ANDERSON. Mr. Forsythe, as you know there was an EIS prepared on that site in which NMFS played a very active role in being interviewed by the contractor and EPA in commenting on the site.

A group from NOAA, I don't believe it is from the National Marine Fisheries, but from the research side has done extensive work on the site in terms of monitoring and what have you since the EIS was published some time in 1980.

As I mentioned before, comments on the proposed site designation or comments on the inshore sites have not been received from NMFS and we look forward to those comments.

There is particularly an interest in the tile fish industry which has built up along the edge of the shelf and part of the 106 mile site comes up over the edge of the shelf and might impact that tile fish industry. And last week I met, at your invitation, with some of the fishermen down there and was talking with some of the people and asked if they might comment and give us some information on that.

Mr. FORSYTHE. I understand the comment took about 5½ hours?

Mr. ANDERSON. Yes. Well, it was pleasant. It was less than usual.

Mr. DAVIES. May I also respond to that question?

Mr. FORSYTHE. Yes.

Mr. DAVIES. As part of ongoing activities between research and development of EPA and parts of NOAA, particularly national marine fisheries, an assessment document has been put together which is, I think in final draft now on the 106 mile site.

Looking particularly at the impact on resources and the value of those resources to the fisheries and potential impact of disposing of waste at that site on the fisheries in surrounding areas, particularly looking at things like the passage of the Gulf Stream and the warm core across the site. That should help us very much in our deliberations in the next couple of months on the 106 mile site.

But I think it is perhaps an indication of the level that we have gone to in interagency coordination that we have been able to put together an assessment document.

Mr. FORSYTHE. It is a level that you certainly should have gone to and I appreciate your answer very much.

Dr. ANDERSON. If I could go on a little further in Mr. Eidsness' testimony, he noted that an intra-agency group is being formed to evaluate the data that has come in with this and also to go out and actually interview people from NMFS or NOAA and from the respective States as well before we make the decision.

Mr. FORSYTHE. Well, it is certainly timely.

Thank you very much, Dr. Anderson.

Mr. D'AMOURS. Are there any remaining questions from the panel? Mrs. Boxer?

Mrs. BOXER. I will be very expeditious. Thank you, Mr. Chairman.

I am really very concerned about the way this testimony has been going. I asked a very simple question; is EPA considering proposing regulations which would rescind an existing prohibition against the dumping of substances known to be carcinogenic?

The first answer, yes and no; and then on rethinking, you said you were not sure. The chairman reads from some proposal coming from EPA you say certainly did not come from you. I appreciate that but the fact that such a proposal would emanate from within the Environmental Protection Agency, which would weaken the laws as they relate to health and known carcinogens, I can't fathom. I guess what I want to ask you, sir, because you do represent the EPA here today, what do you see as the role of the Environmental Protection Agency in just two sentences or less?

I am very serious because a lot of times lawyers quibble about this but in general—

Mr. EIDSNESS. To protect the public health and the environment and follow the mandates set before us by the Congress and signed into law by the President, period.

Mrs. BOXER. So protection of the public health and safety and the environment would be your charges?

Mr. EIDSNESS. Absolutely. Excuse me, ma'am. I raised my hand and took an oath to that when I took this office and I want you to see that my hand is still up.

Mrs. BOXER. Well, I am very pleased. What I am trying to get by way of questioning is to see whether the actions of EPA follow up on that solemn oath that I took and you took really to protect the health and safety of the people.

And I would like to ask how you would feel about banning all hazardous waste from being dumped? There is a bill that has been introduced, H.R. 1700, which would basically ban all dumping of hazardous waste until we figure out what to do with it. How would your agency feel about that approach since your charge is to protect the health and safety?

Mr. EIDSNESS. I am really approaching this more as an engineer that spent 15 years in this field. The answer is that such a ban, and that may be your policy and that may be the result, would acknowledge the theoretical possibility that there may be a greater environmental or public health consequence to the alternative disposal.

As an engineer, I can't accept that flatly that we would be prohibited as engineers from looking at alternatives which may be

more sound environmentally or from a public health point of view and that, of course, is the dilemma that we face here that there are options from an engineering point of view and a public health point of view and they should be thoroughly analyzed on a site specific basis on the merits of the case.

But if the public policy, the Congress will and the President so signs, if you want a ban of hazardous waste in the ocean then that will be the policy that I will pursue as Assistant Administrator for Water in the Environmental Protection Agency.

If that same approach is taken on the land and not allowing it to be burned, then we ought to think through the consequences of that.

Mrs. BOXER. Indeed. Thank you.

Mr. D'AMOURS. Thank you, Mrs. Boxer.

This will be the final 5 minute round of questioning. I recognize for that purpose Mr. Hughes.

Mr. HUGHES. Thank you, Mr. Chairman. I would like to followup again the round of questioning that I was on dealing with the 12 mile site.

Dr. Anderson, is it your belief that significant degradation of the marine environment has taken place in the 12 mile site?

Dr. ANDERSON. Yes, sir.

Mr. HUGHES. And is it your belief that an important part of that degradation has been accomplished by the dumping of sewage sludge?

Dr. ANDERSON. A part of that has been accomplished by dumping sewer sludge, a part discharged from the harbor and a part by dumping the dredge—

Mr. HUGHES. If you would, sir, was sewage sludge an important part?

Dr. ANDERSON. Yes, sir. In terms of the particular parameters an important part, yes. In terms of all pollutants that come into the bight apex, as you are aware—

Mr. HUGHES. The answer to my question then is yes, it is an important part?

Dr. ANDERSON. Yes, in some parameters; not all.

For example, Congressman, the sludge dumping has an input of pathogenic bacteria. There is more pathogenic bacteria coming out of the harbor itself than there is from dumping of sludge. So in some pollution parameters, yes, sewerage sludge plays an important part; in others it does not.

Mr. HUGHES. Well, the reason I asked you is because I just gave back to you the substance of your language in the affidavit that was submitted by EPA in the *Sofaer* decision.

Dr. ANDERSON. Yes, sir, I understand. I know what you are quoting.

Mr. HUGHES. Would the cessation of ocean dumping of sewage sludge in the New York Bight reduce the total nutrient and organic carbon load in the bight which would also reduce the oxygen depletion stress?

Dr. ANDERSON. At the dump site, yes.

Mr. HUGHES. Would it reduce the contaminants and sediments in seafood organisms.

Dr. ANDERSON. In the sediments and in seafood, yes.

Mr. HUGHES. Would it reduce the occurrence of human pathogenic micro-organisms in bottom sediment?

Dr. ANDERSON. In and around the dump site, yes, sir.

Mr. HUGHES. Would it reduce the occurrence of viable strains of bacteria persistent to normally toxic concentrations of antibiotics?

Dr. ANDERSON. In and around the dump site, yes.

Mr. HUGHES. When you say in and around the dump site, how many square miles?

Dr. ANDERSON. The dump site is 6.6 square miles. The area of impact I am talking about is roughly 20 square miles.

Mr. HUGHES. Would it reduce the stress within the degraded 90 square miles on invertebrate communities?

Dr. ANDERSON. Would you repeat that?

Mr. HUGHES. Would it reduce the stress on natural invertebrate communities?

Dr. ANDERSON. It is probably 20 square miles.

Mr. HUGHES. It would not be negligible?

Dr. ANDERSON. Right.

Mr. HUGHES. The recent New Jersey study that we talked about earlier suggests that significant traces of PCB's are now found in fin fish, particularly bluefish. Does that present any particular concerns to you as a scientist?

Dr. ANDERSON. It presents concern to me as a scientist. It also presents a concern to me as somebody who eats bluefish.

Mr. HUGHES. What does that portend in public health concerns?

Dr. ANDERSON. As I indicated, it is a public health concern and I would like to know from where the bluefish is obtaining that because, as I was indicating to Congressman Forsythe earlier, that PCB's come into that area from various sources; some of which is by sewerage sludge and some of which is by input and some of which comes in by dredged material.

Now bluefish don't reside their entire life at the sewerage sludge dump site nor at the acid site. They move around and they are picking up this material from many sources, one of which is sewerage sludge and how much of it I don't know.

Mr. HUGHES. I have just one more question of you.

Putting aside economic concerns, in your view as a scientist, is the New York Bight unreasonably degraded?

Dr. ANDERSON. As a scientist I can talk about the degradation and yes, significantly degraded. Unreasonable is a legal term and that has yet to be determined whether that 12 mile site is unreasonably degraded within the sense of the statute.

Mr. HUGHES. Previous to *Sofaer*, what was the position?

Dr. ANDERSON. I would have said it is unreasonable degradation in the marine environment, but *Sofaer* has shown me that "unreasonable" is statutory language.

Mr. HUGHES. What changes the situation then is balancing, including the economic balancing of the *Sofaer* decision; is that correct?

Dr. ANDERSON. Well, to the extent that it is balancing, I don't think that *Sofaer* is requiring that we make our decisions completely upon economic criteria.

Mr. HUGHES. Let me ask just one additional question. Are the toxic contaminants in ocean-dumped sludge more available to bio-

logical organisms because they are bound to organic material. Would the same toxic materials be as available if they were bound to dredge materials or suspended particles in the Hudson estuary?

Dr. ANDERSON. If we are talking about an organic pollutant I would agree, not a metal.

Mr. HUGHES. I see my time is up. I thank you.

Mr. D'AMOURS. I thank the gentleman from New Jersey as well as I thank the members of this panel, Mr. Eidsness and his panel, for their careful attention to the committee in this matter.

Mr. EIDSNESS. Thank you, Congressman D'Amours. I appreciate the opportunity to be here. I am sorry I was not a little bit more lively today, but I am feeling a little under the weather. I look forward to working with this committee in the future.

Clearly the kinds of probing questions that you and other members have brought to the floor today are the reasons why working in the Environmental Protection Agency is so exciting. There are no black and white answers and I think as long as we always look forward to a cleaner and safer environment and that is our mandate, that we will be making the right decisions over time.

Mr. D'AMOURS. If we can work with the EPA towards that goal and within those parameters, we would consider that we have made some progress indeed. We look forward to an opportunity to work with you in that regard.

We thank the panel and I will now call the next witnesses, who are Mr. William Gianelli, Assistant Secretary of the Army, Civil Works, Office of the Secretary of the Army, who is accompanied by Brigadier General Edgar, Deputy Director of Civil Works, Office of the Chief Engineer, Corps of Engineers.

STATEMENT OF WILLIAM R. GIANELLI, ASSISTANT SECRETARY OF THE ARMY (CIVIL WORKS), OFFICE OF THE SECRETARY OF THE ARMY, ACCOMPANIED BY BRIG. GEN. C. E. EDGAR III, DEPUTY DIRECTOR OF CIVIL WORKS; LANCE WOOD, ASSISTANT CHIEF COUNSEL FOR ENVIRONMENT AND REGULATORY PROGRAMS, OFFICE OF THE CHIEF OF ENGINEERS, CORPS OF ENGINEERS; AND DR. ROBERT M. ENGLER, CHIEF, CONTAMINANT MOBILITY AND REGULATORY CRITERIA RESEARCH GROUP, U.S. ARMY CORPS OF ENGINEERS, WATERWAYS EXPERIMENT STATION, VICKSBURG, MISS.

Mr. D'AMOURS. Welcome, gentlemen. We thank you not only for your attendance here today but for your great patience.

We look forward to your testimony and please proceed when you are ready.

Mr. GIANELLI. Thank you very much, Mr. Chairman, and members of the subcommittees.

I am Bill Gianelli, Assistant Secretary of the Army for Civil Works. As you indicated, Mr. Chairman, I am accompanied today by Brig. Gen. C. E. Edgar III, who has been recently assigned as Deputy Director of Civil Works and Mr. Lance Wood on my left, who is Assistant Chief Counsel for Environment and Regulatory programs, and both of these gentlemen are from the Office of the Chief of Engineers of the Department of the Army.

With your permission, Mr. Chairman, I have a more detailed statement for the record. I would like to brief that if I could and then all three of us would be available for questions and we have additional staff in the audience if necessary.

Mr. D'AMOURS. I would very much appreciate your doing that in view of the lateness of the hour, sir.

Mr. GIANELLI. I appreciate this opportunity to appear before you to discuss reauthorization of title I of Public Law 92-532 the Marine Protection, Research and Sanctuaries Act, as amended.

Mr. Chairman, the interest of the Secretary of the Army and the Chief of Engineers in these proceedings is primarily in two areas. The first is our mission to maintain navigation within the United States. The corps dredging program is indispensable to the viability of the Nation's extensive system of channels, harbors, and ports, which in turn are essential to the economic well-being and defense capability of the United States.

The corps, in fulfilling its mission to maintain, improve, and extend waterways of the United States, is presently responsible for approximately 25,000 miles of Federal channels and over 1,000 harbors. The corps dredging operations in support of this navigation mission necessitate the disposal of from 250 to 300 million cubic yards of dredged material each year.

At present, the importance of dredging, to maintain navigation for national defense and the economy is clearly recognized in both the Ocean Dumping and the Clean Water Act. In my opinion, any future amendments to these statutes must continue to safeguard our ability to dredge and to dispose of dredged material in economical and environmentally responsible ways.

Our second great area of interest is that the Secretary of the Army, acting through the Chief of Engineers, regulates dredged material disposal activities within the United States. This responsibility is contained in and is administered under section 103 of the Ocean Dumping Act and section 404 of the Clean Water Act. In addition, other statutes such as NEPA, the Endangered Species Act, and the Coastal Zone Management Act, in many circumstances govern the manner in which dredging and disposal activities are undertaken.

Dredged material disposal in freshwater and in coastal areas to the outer boundary of the territorial sea is regulated under the Clean Water Act. The jurisdiction of the Ocean Dumping Act extends outward from the baseline from which the territorial sea is measured. Therefore, a zone of jurisdictional overlap exists between the baseline and the outer boundary of the territorial sea where, strictly speaking, the provisions of both the Clean Water Act and the Ocean Dumping Act apply.

To eliminate this problem, an agreement has been reached between EPA and the corps, which agreement stipulates that only the Ocean Dumping Act will be applied in the zone of overlap. Therefore, the vast majority of permits for ocean disposal of dredged material must be evaluated under the Ocean Dumping Act and its implementing regulations. Although the corps is not required to issue permits for its own activities, the corps does comply with the same criteria applied to a permit applicant.

On an average, 61 million cubic yards of dredged material, or about 20 percent of the total quantity of sediment dredged under Federal jurisdiction, are disposed of in ocean waters each year. We estimate that approximately 100 million cubic yards of sediment are dredged from coastal areas each year and are disposed by other means than ocean disposal. The vast majority of these ocean disposal operations which we regulate involves clean sands, much of which is suitable for beach nourishment or for construction or other beneficial uses. It would be used for such purposes but for the normally prohibitive cost of transportation to sites where it can be used.

On the basis of volume, dredged sediments are by far the largest single source of materials which are disposed in the ocean each year. However, when put into proper environmental perspective, these volumes and their impacts are, in most cases, quite insignificant when compared to natural sediment movements into and along the ocean shelf due to flood runoff, frequent storm events, and other natural processes.

The corps responsibilities for regulating the disposal of dredged material, including contaminated materials, directly involve and impact upon a number of environmental media, including inland waters, wetlands, estuaries, terrestrial habitats, and the ocean. It is our responsibility to insure the maximum possible protection to each of these media in our Federal activities, as well as in the management of our dredged material regulatory programs.

It is our opinion, based on available scientific evidence, that the ocean may, in many cases, provide the best available alternative for minimizing the environmental impacts of disposing of large volumes of dredged sediments. Our research, as well as information resulting from a number of independent studies of both domestic and international origin, have demonstrated that the ocean has a significant assimilative capacity for dredged sediments, in contrast to inland disposal alternatives. This scientific information is well documented in a number of recent reports; that is, the National Advisory Committee on Oceans and Atmosphere [NACOA] report of and proceedings of symposia, and also the National Academy of Engineering Symposium of June 1981.

Over the years the act has been interpreted by others, and in particular by those in the environmental community, as relegating ocean disposal to a distinctly unfavored position among alternative disposal methods; that is, as an option to be used only as a last resort.

Nothing in the Ocean Dumping Act, as we interpret it, indicates that ocean disposal of dredged material must be discouraged or phased out. The interpretation is, as we have indicated, consistent with the scientific and technical data. In order to avoid any continuing confusion on this point, however, we will explore within the administration the need for legislative clarification of this issue.

Finally, Mr. Chairman, I would be less than candid today if I did not express the fact that the Department of the Army has some concerns about the current status and recent history of the ocean disposal program for dredged material. We will continue to work within the administration and particularly with EPA to resolve

problem areas and to develop an efficient and viable ocean dumping program.

In addition, questions now exist concerning responsibilities and means for monitoring and managing ocean disposal sites for dredged material. I hope to work with my colleagues at the EPA and with the subcommittees and their staffs to address and resolve these concerns, perhaps by means of appropriate memoranda of agreement between our two agencies.

This concludes my formal presentation. I would be pleased to respond to any questions.

[The statement of Mr. Gianelli follows:]

PREPARED STATEMENT OF WILLIAM R. GIANELLI, ASSISTANT SECRETARY OF THE ARMY
(CIVIL WORKS), OFFICE OF THE SECRETARY OF THE ARMY

Chairman D'Amours, chairman Breaux and members of the subcommittee; I am Mr. William R. Gianelli, Assistant Secretary of the Army (Civil Works). I am accompanied today by the following members of the Office, Chief of Engineers, Headquarters, Department of the Army: Brigadier General C. E. Edgar III, recently assigned as the Deputy Director of Civil Works; and Mr. Lance Wood, Assistant Chief Counsel for Environment and Regulatory Programs.

I appreciate this opportunity to appear before you to discuss reauthorization of Title I of Public Law 92-532, the Marine Protection, Research and Sanctuaries Act, as amended.

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for construction or other beneficial uses. It would be used for such purposes but for the normally prohibitive cost of transportation to sites where it can be used. On the basis of volume, dredged sediments are by far the largest single source of materials which are disposed in the ocean each year. However, when put into proper environmental perspective, these volumes and their impacts are, in most cases, quite insignificant when compared to natural sediment movements into and along the ocean shelf due to flood runoff, frequent storm events, and other natural processes.

An unfortunate misconception has somehow developed within some parts of the public sector as to what a typical ocean dredged material disposal activity actually involves. To some people, ocean dumping is synonymous with the New York Bight, sludge or spoil, toxic chemicals, and carcinogens. However, this is not representative of the majority of typical dredged material disposal actions, in general, and particularly it is not representative of ocean disposal activities which we regulate.

I would like to add, Mr. Chairman, the Corps has placed, and continues to place, a high priority on research to address the environmental aspects of dredging and dredged material disposal. We see this research commitment as a continuing high-priority requirement due to the complexity and environmental sensitivity of our navigation and regulatory responsibilities. I would add that a beneficial spin-off of our research effort to date, and one which is quite gratifying to me, is the fact that the Corps is now recognized internationally as a leader in dredging-related environmental research. Indeed, other nations now actively seek out the Corps advice in this area.

The Corps responsibilities for regulating the disposal of dredged material, including contaminated materials, directly involve and impact upon a number of environmental media, including inland waters, wetlands, estuaries, terrestrial habitats, and the ocean. It is our responsibility to insure the maximum possible protection to each of these media in our Federal activities, as well as in the management of our dredged material regulatory programs.

Two fundamental management conclusions drawn from the Corps Dredged Material Research Program (DMRP), completed in 1978, have been quite instrumental in guiding our research on dredged material disposal and in formulating our approach to regulating our own as well as permitted dredged material disposal activities. The first is that there is no single dredged material disposal alternative that presumptively is most suitable for a region, for a type of dredged material, or for a group of projects. Correspondingly, there is no inherent effect or characteristic of a dredged material disposal alternative that rules it out of consideration from an environmental standpoint prior to specific on-site evaluations.

It is our opinion, based on available scientific evidence, that the ocean may, in many cases, provide the best available alternative for minimizing the environmental impacts of disposing of large volumes of dredged sediments. Our research, as well as information resulting from a number of independent studies of both domestic and international origin, have demonstrated that the ocean has a significant assimilative capacity for dredged sediments, in contrast to inland disposal alternatives. This scientific information is well documented in a number of recent reports (i.e., the the National Advisory Committee on Oceans and Atmosphere (NACOA) report of and proceedings of symposia (i.e., the National Assembly of Engineering Symposium of June 1981)).

Results of the DMRP and other research have also demonstrated the feasibility of using certain types and quantities of dredged materials for such productive uses as creation and restoration of marshes and wetlands and for beach nourishment. However, our experience to date with productive uses of dredged materials, is that these disposal options are frequently limited. These limitations result from inappropriate types and quantities of material. This is due, in part, to logistic considerations and, in part, to existing regulatory requirements. As an example, dredging requirements do not always coincide with requirements for beach nourishment or other productive uses of dredged material. Thus, stockpiling of appropriate quantities and types of dredged material, and possibly at multiple sites for rehandling at a later date, would be required to insure maximum utility of certain of these disposal options. These, and all other feasible disposal options, are routinely considered in the planning process for our projects and are utilized to the maximum practical extent.

Over the years the act has been interpreted by others, and in particular by those in the environmental community, as relegating ocean disposal to a distinctly unfavored position among alternative disposal methods (i.e., as an option to be used only as a last resort). Nothing in the Ocean Dumping Act, as we interpret it, indicates that ocean disposal of dredged material must be discouraged or phased out. This interpretation is, as we have indicated, consistent with the scientific and technical

data. In order to avoid any continuing confusion on this point, however, we will explore within the Administration the need for legislative clarification of this issue.

Finally, Mr. Chairman, I would be less than candid today if I did not express the fact that the Department of the Army has some concerns about the current status and recent history of the ocean disposal program for dredged material. We will continue to work within the Administration to resolve problem areas and to develop an efficient and viable ocean dumping program.

In addition, questions now exist concerning responsibilities and means for monitoring and managing ocean disposal sites for dredged material. I hope to work with my colleagues at the EPA and with the Subcommittees and their staffs to address and resolve these concerns, perhaps by means of appropriate memoranda of agreement between our two agencies.

This concludes my formal presentation. I would be pleased to respond to any questions.

Mr. D'AMOURS. I wish to thank you, Mr. Gianelli, for your testimony and for summarizing it as you did. The committee very much appreciates that. It was very good testimony, and I have no questions of my own at this time.

I will turn the questions over to the ranking minority member, Mr. Forsythe.

Mr. FORSYTHE. Thank you, Mr. Chairman, and thank you too, sir, for your very concise testimony.

As I was following your testimony, there was one paragraph which you did summarize—as a matter of fact, I think you skipped it—that did catch my eye.

One important thing that has been the source of a lot of our discussion today and for the past number of years is the misconception about the importance of the New York Bight as compared to the rest of the world of ocean disposal. I thoroughly agree with you that overall it is not the major area of concern, but unfortunately for this committee and the areas of the Nation that it represents, it has received an overwhelming amount of attention.

Mr. Anderson discussed the sources of the contamination, particularly the dredge spoils that are deposited in the New York Bight and the fact that they do come in large measure out of the Hudson River, which has a major PCB problem.

What are we going to do with this kind of a problem?

Mr. GIANELLI. I would like to respond, if I could, Congressman, by having one of our staff people who has been quite familiar with that problem perhaps respond, if you care to have it. Dr. Bob Engler is the scientific adviser for the corps and has done considerable work with that problem, and is concerned also.

Mr. FORSYTHE. Thank you. Introduce yourself for the record.

Dr. ENGLER. The PCB problem in New York Harbor is very severe, as you said.

Mr. D'AMOURS. Mr. Forsythe just suggested that you identify yourself so it will be on the record.

Dr. ENGLER. I'm sorry, sir. I am Dr. Robert M. Engler, Chief of the Contaminant Mobility and Regulatory Criteria Research Group, with the U.S. Army Corps of Engineers Waterways Experiment Station. I act as the chief scientific adviser to the corps regarding ocean dumping and dredge materials in general.

Mr. D'AMOURS. Thank you, sir.

Dr. ENGLER. The PCB problem in New York is widespread and serious, serious to the point that in the New York district we carry out a very intensive program in evaluating sediments from Federal

projects as well as requiring permit applicants to go through a thorough ecological assessment of the materials prior to dumping.

After dumping and as part of the corps site management strategy, we require point dumping at the disposal site to insure that the material is retained within the site and covered with subsequent disposal. For materials that we consider highly contaminated, they either do not go to the ocean, or under certain stringent circumstances may be capped with clean sediments in the ocean at the approved site.

Now, in addressing the PCB problem, we use the environmental criteria developed by EPA that requires intensive ecological assessments. In these ecological assessments, we determine if the PCB's first are released from the sediments and, if so, are they toxic or are they bioaccumulated by marine organisms.

If we find out that PCB's are not, then the material is considered acceptable ocean dumping. If it is unacceptable, then other alternatives must be found.

Mr. FORSYTHE. Well, I would like to just carry that on. You have told me what you look for, but what do you find?

In other words, is the problem with PCB in the Hudson River and in the sediments in the bottom of the river creating major contamination problems in the fish and shell fish in the New York Bight area?

Dr. ENGLER. No, sir, we do not find the dredged material containing PCB's to be a major source of contamination. In fact, we do not find any organisms living on the dredged material disposal site to have body burden levels of PCB's in excess of what occurs outside the disposal site on a nondumped area.

Mr. FORSYTHE. You have said that about the dredge material which is deposited at the disposal area.

Dr. ENGLER. Yes.

Mr. FORSYTHE. Are you also monitoring the input level of PCB's in the river and harbor waters? Is it the problem?

Dr. ENGLER. Well, the corps is not specifically monitoring that area. That falls within the purview of EPA and NOAA. We are very aware of these monitoring studies and find the data very useful.

There are PCB's continually moving into the New York Harbor East Hudson and Raritan Estuary, from the Hudson River itself, from sources such as sewage outfalls and storm runoff. There is a considerable amount of PCB's moving into the harbor area in the water attached to particulate and certainly on the sediment.

We do find out, however, that PCB's attached to sediments are in many cases almost irreversibly retained on the sediment, not in all cases, of course, but the sediments act as a very strong sink for this contaminant. We find very little biological uptake of the PCB's from large quantities of the New York sediment material itself.

Mr. FORSYTHE. Thank you.

I see my time is expired, Mr. Chairman. I may want to come back for another round.

Mr. D'AMOURS. Certainly, Mr. Forsythe.

Mr. Carper, do you have any questions?

Mr. CARPER. Thank you, Mr. Chairman.

Mr. Gianelli, gentlemen, I welcome you to our hearing today.

I don't recall, Mr. Gianelli, if you said in your comments your official position toward H.R. 1761. Could you just clarify that for me, please?

Mr. GIANELLI. I don't think we indicated that. As a matter of fact, I think we just received a copy of that last Friday.

If the committee desires, we would be happy to give you our comments with respect to that legislation in writing.

Mr. CARPER. If you would.

[The information follows:]

The Department of the Army is currently reviewing H.R. 1761. The Army's comments and official position on H.R. 1761 will be included in a legislative report to the Chairman, Committee on Merchant Marine and Fisheries, which will be submitted to the Committee after completion of the legislative clearance process within the Executive Branch.

Mr. CARPER. What are your comments about the AAPA's concerns regarding the restrictiveness of that legislation? I would be interested in your thoughts, if any, at this time.

Mr. GIANELLI. Could we give you a response to that in writing, too, please?

Mr. CARPER. That would be fine.

[The information follows:]

The initial review by the Army of the prepared statement of Alfred Hammon, submitted on behalf of the American Association of Port Authorities (AAPA), noted a range of detailed comments on various provisions of H.R. 1761. We will review these comments in the context of the Army's legislative report on the bill referred to previously.

Mr. CARPER. Thank you very much, Mr. Chairman.

Mr. D'AMOURS. Thank you, Mr. Carper.

Mr. Forsythe, did you have further questions you would like to ask?

Mr. FORSYTHE. Let me have just one more.

I really do thank you because I think that was an excellent answer, although it may have pulled the rug from under some ideas I have had.

I am sure you are not the agency primarily related to this question. Do you find the same situation in sewage sludge? Are the PCB's in sludge materials bound up and therefore not available to micro-organisms or to the life chain?

Dr. ENGLER. You are asking with regard to sewage sludge, sir?

Mr. FORSYTHE. Yes.

Dr. ENGLER. We are not conducting any research in that area and have to lean heavily on what EPA finds.

Mr. FORSYTHE. Since I let EPA get away, can you tell me what EPA has found?

Dr. ENGLER. Well, they are certainly getting mixed results from their investigation. I really can't give you a firm answer as to yes or no in all cases.

Mr. FORSYTHE. Well, let me go back again.

Do you recognize that the PCB's that are free in the water is one of the major sources? Does your research take you into the area of what happens in that kind of a situation?

Dr. ENGLER. Yes, sir, it does. Our bioassays that we conduct under the permit program also address this factor.

Mr. FORSYTHE. What do you find in that situation?

Dr. ENGLER. Again we find a very small percent of the sediments at the dredges exhibit uptake of PCB's. So the answer is, yes, we do find some bioaccumulation of PCB's from the sediments that I would class highly contaminated, not only with PCB's but petroleum hydrocarbons that tend to make PCB more soluble and available. In these cases, the sediments are given special care.

Mr. D'AMOURS. Mr. Carper, do you have any followup questions?

Mr. CARPER. No, sir, I do not.

Mr. D'AMOURS. Well, Mr. Gianelli, we appreciate your being here today. I very much enjoyed your excellent testimony. I am very gratified and pleased to see Dr. Engler and General Edgar again and to see Mr. Wood also. Thank you for your attendance.

Mr. GIANELLI. Thank you, Mr. Chairman.

Mr. D'AMOURS. Next will be Mr. Fred Harper, chairman, Conference of Coastal Agencies, which is a committee of the Association of Metropolitan Sewerage Agencies.

Mr. Harper, would you come forward, please?

Thank you. You may proceed whenever you are ready, Mr. Harper.

STATEMENT OF FRED HARPER, CHAIRMAN, CONFERENCE OF COASTAL AGENCIES, A COMMITTEE OF THE ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES, ACCOMPANIED BY LEE C. WHITE, COORDINATOR, AND DOUGLAS SEGAR, TECHNICAL CONSULTANT, CONFERENCE OF COASTAL AGENCIES

Mr. HARPER. Thank you, Mr. Chairman and members of the subcommittees.

My name is Fred Harper and I am general manager of the County Sanitation District of Orange County, Calif.

With me today is Mr. Lee C. White, coordinator of the Conference of Coastal Agencies, and also Dr. Douglas Segar, technical consultant to the CCA group.

I am speaking to you today in my capacity as chairman of the CCA, a group of 17 coastal sewerage agencies on both the east and west coasts. CCA is a committee of the Association of Metropolitan Sewerage Agencies, an association of nearly 90 major municipal sewerage agencies throughout the country who serve over 70 million people in the Nation's major metropolitan areas.

As responsible public entities, we are seeking by scientific investigations and engineering studies the best environmental answers to solving pollution problems associated with man's activities. In the past decade, occasional conflicts and inconsistencies have arisen between environmental laws that are intended to protect individual media: air, land, surface water, ground water, or the oceans.

During the past 5 years, two blue ribbon panels criticized the medium-by-medium approach to waste water management and sewage sludge management specifically. They both recommended that a new approach be implemented that would result in treatment and placement of waste materials in the medium and in the manner that minimized the risk to human health and environmental degradation.

I am referring to the 1978 report of the National Academy of Sciences and National Research Council entitled "Multi-Medium Management of Municipal Sludge." The other report issued in January 1981 is that of the National Advisory Committee on Oceans and the Atmosphere entitled "The Role of the Oceans in a Waste Management Strategy."

The Conference of Coastal Agencies strongly supports the recommendations in those two reports. In general, the scientific community has shifted its view within the past few years and now believes we must do a better job of monitoring the impacts of disposing of municipal sludge and other materials in the oceans.

My own State of California, which has had a total ban on ocean disposal of sludge, is now considering, in the light of their investigation, the possibility of ocean disposal.

Mr. Chairman, if I may, I would like to introduce in the hearing record an excerpt from the State of California Environmental Impact Report dated January 1983.

Mr. D'AMOURS. Are you asking to include that?

Mr. HARPER. Yes.

Mr. D'AMOURS. Without objection, it is so ordered.

[The information follows:]

(EXCERPTS FROM)

Draft

Environmental Impact Report:

Amendment of the

Water Quality Control Plan

Ocean Waters of California

(Ocean Plan)

January 1983

State Water Resources Control Board

F. Sludge Disposal

Present Policy

The Ocean Plan (Chapter V.C.) prohibits discharge of sludge or sludge digester supernatant to the ocean. The Federal Ocean Dumping Act prohibits dumping of sludge where it will cause "unreasonable degradation" of the marine environment or human health. Current EPA regulations, based on the Federal Clean Water Act, prohibit the discharge of sewage sludge to the ocean through discharge pipes.

At present only one California entity, the City of Los Angeles, routinely discharges sewage sludge to the Pacific Ocean. This discharge, from the City's Hyperion treatment plant, is located approximately 7 miles (10 km) from shore in Santa Monica Bay. Under an operative consent decree, sludge discharge from this outfall is to cease by July 1, 1985.

The jurisdiction of the State of California and the Ocean Plan over this outfall has been challenged, on the basis that it lies outside the State's "3-mile jurisdictional boundary." However, the California Constitution defines the waters of Santa Monica Bay as territorial waters of the State. The State Water Resources Control Board takes the position that absent conflict with federal law the State has jurisdiction over this sludge outfall.

Historical Development

In April 1969, the federal Council on Environmental Quality (CEQ) began, at the President's request, a comprehensive study of ocean dumping and its effects on the marine environment. CEQ's report was presented in October, 1970 (29), and concluded in general that the rapidly rising use of the oceans as a dumping ground for municipal and industrial wastes should be reversed. Among their specific recommendations was:

Ocean dumping of digested or other stabilized sludge should be phased out and no new sources allowed.

The CEQ admitted to "serious information deficiencies" in the pertinent ecological and toxicological literature. As data on ecological effects of ocean disposal were scarce, CEQ based their recommendations in large part on inference and extrapolation. Their proposed ban on sludge disposal was based more on fear of the consequences of projected increases in the rate of such disposal than on the actual effects of past practices.

The rationale for the California ban on ocean sludge disposal, enacted in the 1972 Ocean Plan, reflects the same lack of specific information and the same desire to protect the marine environment from unknown consequences. A SWRCB staff report of November 9, 1971 outlines the rationale behind the ban on sludge disposal: "In view of the heavy metals and other toxicants concentrated in sludge, 'release of such substances into the environment, when little is known of their eventual fate, is not warranted.'"(30)

The Marine Protection, Research and Sanctuaries Act (Ocean Dumping Act) passed by Congress in 1972, and subsequent amendments to the Federal Water Pollution Control Act (Clean Water Act) leaned heavily on the 1970 CEQ report in their restrictive approach to ocean disposal.

EPA writes in 1982 that in 1973, when the Ocean Dumping Act became law and EPA was required to have implementing regulations in force, "very little actual data on the impacts of pollutants on the oceans, particularly on the near-shore areas of the Continental Shelf, were available. ...EPA therefore felt that the statutory mandates should be met by adopting a very stringent approach based on conservative numerical values..."(31)

The 1977 revision of the Ocean Dumping Act prohibited dumping, after December 31, 1981, of any sewage sludge (or other waste treatment effluent) "which may unreasonably degrade or endanger human health, welfare, amenities, or the marine environment, ecological systems, or economic potentialities." EPA, which had previously adopted this same deadline by regulation, took the view that the dumping of sludge *ipso facto* constituted "unreasonable degradation" of the marine environment, and thus must cease by December, 1981.

While ocean dumping of wastes has been regulated by the Ocean Dumping Act, introduction of wastes to the ocean through outfalls is regulated by the Federal Water Pollution Control Act (Clean Water Act) as revised in 1972 and amended in 1977 and subsequently. The Clean Water Act declares as a "national goal that the discharge of pollutants into the navigable waters be eliminated by 1985."

The Act does not prohibit the disposal of sewage sludge in the ocean, but provides for regulation and permitting of such disposal by EPA and by the States: Where sewage sludge is found to result in pollutants entering navigable waters, "The Administrator shall issue regulations governing the issuance of permits for the disposal of sewage sludge...." A 1977 amendment added the provision that, within the published EPA guidelines, "The determination of the manner of disposal or use of sludge is a local determination..."(32). The regulations issued by EPA under the Act currently prohibit the ocean discharge of sewage sludge.

Since the enactment of the environmental legislation of the 1970's, research has progressed in several related areas: On the ecological effects of marine disposal of sludge and other wastes, on the technology of sewage treatment, and on the effects of alternative uses and disposal methods for sludge. Such research, along with the experience of treatment agencies and regulatory authorities, have indicated certain problems with the highly restrictive and medium-oriented approach of this legislation.

The Ocean Disposal Steering Committee of the National Research Council wrote in 1976:

"The legislative and regulatory framework should incorporate a mechanism that evaluates all the options (air, land, and water) for disposal of a residual material and seeks a balanced and equitable

allocation of costs and benefits. The emphasis of the current regulatory framework may, in practice, overprotect one sector of the environment and transfer the residual problem to another sector."(33)

In 1976 EPA also recognized the difficulty of administering medium-oriented legislation, specifically the Ocean Dumping Act: "The marine environment is, however, only a part of the total environment which must be used for the ultimate disposal of wastes, and problems which affect the marine environment and solutions to these problems must be viewed in terms of their interrelation with the total environment. For example, EPA under the mandate of the Act is in the process of phasing out ocean dumping of materials which do not meet the criteria, but this creates other environmental problems. Some alternative form of disposal must be developed for each waste that is phased out of ocean dumping."(31)

However, other methods of disposal were regulated by equally medium-oriented pieces of legislation. The National Advisory Committee on Oceans and Atmosphere (NACOA), reporting to the President and the Congress in January, 1981, says of this piecemeal environmental legislation that "It was impossible to implement all five statutes simultaneously and, as a result, the implementation of each shifted the burden of receiving society's waste products to the medium that was least regulated at that moment."(34) Illustrating the plight of those who find themselves subject to such legislation, NACOA continues, "An industry or municipality faced with the problem of what to do with its wastes may well find that the Clean Air Act effectively prohibits incineration; the [Clean Water Act] similarly limits disposal at sea through a pipe or in internal waters by any means; the [Ocean Dumping Act] prohibits disposal at sea via barging; and the [Resource Conservation and Recovery Act] and the [Safe Drinking Water Act] effectively prohibit land disposal or deep-well injection."

In their effort to enforce such environmental legislation, the EPA and U.S. courts have found themselves issuing decisions and requiring actions which were admittedly not in the best interest of the total environment (35). However in 1981 a U.S. District court held, in *New York City v. EPA*, that EPA must integrate its responsibilities toward the various environmental media: EPA's proposed total ban on the ocean dumping of sludge "prevents the Agency from minimizing the overall risk to human health and the environment posed by waste disposal."(36)

Research on the ecological effects of ocean sludge disposal has continued in southern California since (and long before) the 1972 publication of the California Ocean Plan. A task force of university scientists, commissioned by the State Water Resources Control Board to evaluate effects of the Hyperion (City of L.A.) sludge discharge, reported in 1977 that an ecologically degraded area exists in the vicinity of the outfall, where species diversity is low and concentrations of a number of toxic metals and organic compounds are elevated.

They believed, however, that the conditions were reversible, and that "it appears that conditions are more or less stabilized and would remain so providing there is not any major change in the nature and quantity of the

discharge."(37) They further found that "Apart from the impacted area in the vicinity of the 7-mile discharge there is no convincing evidence of any general changes in Santa Monica Bay due to this outfall."

The Southern California Coastal Research Project (SCCWRP) reported in 1980 (38) that the area of serious ecological degradation associated with the Hyperion sludge outfall was a little more than one square mile in the upper region of the submarine Santa Monica Canyon. They estimated the sludge field in the canyon to contain approximately 10% of all solids discharged through the sludge outfall during the past 22 years. The remainder of the solid material would have been dispersed or consumed. SCCWRP, like the task group cited above, estimated that conditions about the sludge outfall have reached a state of approximate equilibrium. A major concern of both SCCWRP and the task group was the potential and actual accumulation of PCB and chlorinated insecticides. (It has been hypothesized that the major physiological anomaly associated with the sludge field - fish fin erosion - is connected to sediment levels of chlorinated compounds.) Though this concern has not diminished since the Ocean Plan was written ten years ago, the quantity of these compounds released to the Southern California Bight is now roughly one tenth of the amount discharged at that time.

The above NACOA report concludes that "Research to date has shown minimal long-term detrimental effects from ocean waste disposal." Vacarro et. al. agreed in "The Oceans and United States Sewage Sludge Disposal Strategy", (39) 1980: "...recent observations on deep-water sludge disposal would appear to encourage a reappraisal toward a broader oceanic role in future sludge management."

Professors N.H. Brooks and J.E. Krier testified before the U.S. House of Representatives Committee on Public Works and Transportation in September, 1981, that the effects and risks of ocean discharge of sludge must be balanced against the cost of avoidance: "The prohibition of sludge dumping in the ocean is a policy which is not based on scientific, engineering, and economic evaluations of trade-offs, considering alternative disposal methods impacting the land, fresh waters, and/or the atmosphere." (40) They argued strongly for a regional approach to waste disposal regulation: "Land, air and water resources differ significantly from place to place, and controls that make sense for one area will not suit another." "...the need for the ocean disposal option (as for sludge) depends heavily on the impacts of not using the ocean, which may vary considerably among regions."

After considering the legal, ecological and economic ramifications of present and proposed waste disposal methods, NACOA in their January, 1981 report (entitled "The Role of the Ocean in a Waste Management Strategy") made several specific comments and recommendations. Some dealing directly with sludge disposal and its prohibition (as in the Ocean Plan) were:

- o "NACOA believes that we must manage wastes, not media, and that the medium-by-medium approach of the 1970's is no longer adequate." "...Wastes should be disposed of in the manner and medium that minimizes the risk to human health and the environment,..."

- o "NACOA recommends that ocean disposal of sewage sludge either by barge or through properly designed outfalls should continue to be a disposal option under appropriate management conditions and with adequate monitoring safeguards in those areas where no unreasonable degradation of the environment results from sludge disposal."

In February, 1982, EPA proposed revised Ocean Dumping Regulations (31), as mandated by the "New York City vs. EPA" decision. Although these regulations will administer the Ocean Dumping Act, and so do not directly affect the sludge outfalls in California, the ecological and social rationale for EPA's proposed changes would apply equally to sludge disposal through submerged outfalls. EPA proposes a sweeping shift in policy "toward making ocean dumping a viable option for waste disposal in the integrated waste management strategy toward which EPA is moving." EPA now apparently feels, with NACOA and others, that

- 1) the dearth of information which prompted the caution of the 1970's has yielded to baseline data on assimilation and resilience in the ocean, and
- 2) the medium-management policy of the past must give way to waste management in the future:

"...the Agency believes that it now has the scientific basis and operating experience to adopt a more flexible approach toward regulating ocean dumping, and that there is good reason to consider ocean dumping as a viable option for disposal of some wastes..."

"...it is the view of EPA that the ocean should play a role in this strategy concomitant with its ability to assimilate wastes and under conditions where such waste disposal will not cause unreasonable degradation..."

As guidelines for determining what constitutes "unreasonable degradation" EPA proposes:

- o The disposal activity may be considered the primary beneficial use of a designated disposal area: "...parts of the ocean may be reserved for disposal of certain types of wastes to the total or partial exclusion of the use of the site for other purposes."
- o "...allowing some degradation at a dumpsite, but restricting such degradation to conditions which are reversible, is a sound management approach..."
- o Economic considerations may play a part, as will the availability of alternative disposal methods: Otherwise disqualified applications for dumping may be granted where, after exhaustive evaluation, it is demonstrated "that there are no less damaging alternatives available that are economically feasible."

The past decade has seen a change in the prevailing attitude in EPA and the Congress toward waste disposal (including sludge disposal) in the ocean. The medium-oriented, prohibitive thinking of 1970 is giving way to a search for best solutions on a case-by-case basis.

Summary of Comments Received

During the Ocean Plan Review comment period, from January to March 1982, comments were received on the issue of sludge disposal from eight persons or agencies. The intensity, length and detail of these comments, and the volume of supportive attachments, indicated that this was considered a major issue by those who commented on it.

On one side of the sludge issue, Regional Board 8 and R. Fay commented briefly that the current discharge of sludge is degrading the ocean environment, and that alternative disposal methods should be implemented.

On the other side of this issue were detailed comments by SCCWRP, Crown Zellerbach, East Bay Municipal Utility District, Los Angeles County, and the cities of Los Angeles, San Francisco and El Segundo. These commenters were in agreement on the following points:

- o The blanket prohibition on sludge disposal is too broad and not environmentally warranted.
- o The requirement of the Ocean Plan should agree with federal legislation, which prohibits sludge discharge if it results in "unreasonable degradation" of the environment.
- o Disposal in the ocean should be considered one of several viable options, and its environmental and economic effects evaluated against those of the alternative options (land fill, incineration).

EBMUD, San Francisco, and El Segundo pointed out that this issue is being debated on the national level, and urged delay and/or flexibility to ensure consideration of eventual federal decisions. El Segundo, in the most detailed and thorough submission received on this issue, presented several supporting arguments:

- o The City expects to be adversely impacted by air pollution from the proposed Hyperion Energy Recovery System (sludge incinerator). They argue that the very expensive building and operation of H.E.R.S., (required as a result of State and EPA bans on sludge disposal) would cause environmental and economic harm out of proportion to any benefits derived. They are supported in their concerns by attached letters or resolutions from the governing bodies of Burbank, Culver City, Los Angeles County and the Los Angeles Chamber of Commerce.
- o Research by SCCWRP is claimed to show that the effect of the current sludge discharge is largely confined within a deep submarine canyon, representing 0.4% of Santa Monica Bay.

- o The National Advisory Committee on Oceans and Atmosphere recommended in 1981 that ocean disposal be considered a viable alternative for sewage sludge disposal. (NACOA's report, submitted by El Segundo as an attachment, recommends that total bans on ocean dumping/sludge outfalls should be discontinued, and finds "no compelling evidence" that sludge disposal in So. California has had "unacceptable consequences".)

Alternatives

Several alternatives of terminology and policy must be considered for adoption in the Plan. Among these alternatives are:

1. Continuation of the unconditional ban on discharge of sludge to the ocean;
2. Revocation of the sludge discharge prohibition;
3. Adjustment of the sludge discharge regulation to give the State Board flexible case-by-case control over potential sludge dischargers.

The consequences, including environmental impacts, of these options will be considered severally.

1. Continuation of Ban on Sludge Disposal.

In the case of continuation of the present sludge discharge prohibition the State can expect that no new sources of sludge will impact the State's ocean waters in the foreseeable future. While this will have a salutary effect on the marine environment, the overall environmental effect may or may not be beneficial, depending on the problems encountered in alternate forms of sludge disposal. These problems, while generally known, cannot be fully evaluated without reference to specific cases. It is, however, likely that as California's coastal communities continue to grow in extent and density, the dilemma of waste disposal in general and sludge disposal in particular will become less tractable.

The case of the Orange County Sanitation Districts, which have expended considerable resources on studying the problem of sludge disposal, may be used as an illustration. The county is faced with a shortage of suitable landfill sites in the vicinity of the treatment plant, and is evaluating a program of hauling dewatered sludge to new landfills 20 or more miles inland. Their experience, as in other counties, has been that the opposition of neighborhood groups makes siting a sludge landfill a difficult matter. When comparing the expected costs of the landfill program to those of the county's proposed deep water (1000 ft) ocean sludge outfall, Brooks and Krier (40) found that the cost of the landfill operation would be 4-6 times the cost of the ocean disposal alternative. In 1981 dollars, based on a daily production of 150 tons of digested sludge from 350 tons of raw sludge, their estimated total costs for each program were:

	<u>Ocean Disposal</u>	<u>Landfill Disposal</u>
Capital cost (millions)	6 - 11	35 - 48
Annual cost (millions)	1.75 - 2.75	10.6 - 11.9
Cost per ton (dollars)	\$13 - 21	\$82 - 92
(raw sludge)		

In addition to the great financial costs, these authors summarized recent environmental concerns about the landfill disposal option:

"Since the basic laws were formulated in the early 1970's, there has been greatly increased awareness and measurement of groundwater contamination by toxic pollutants. There are apparently greater risks than heretofore realized for contamination of groundwater by surface disposal of both solid and liquid wastes, followed by rainfall percolation and leaching of contaminants to the groundwater supplies. Because groundwater is a major source of drinking water, the direct public health risks of land disposal for a given effluent with trace contaminants (and nitrates) are generally much greater than for marine disposal."

As difficulties in landfill siting, groundwater protection and maintenance of air quality mount, any environmental advantage that may have been counted on in the past from disposal of sludge in the land and air media, versus ocean disposal, may no longer be realized. It is probable, as concluded by EPA, NACOA, U.S. courts and others (see section on Historical Development), that a generalized a priori decision on the relative environmental merits of these various disposal alternatives can no longer be defensibly made.

If the ban on ocean sludge disposal continues in effect, the State can further expect that the discharge of sludge from present sources, specifically from the City of Los Angeles' Hyperion treatment plant, will cease. Los Angeles has consented to halt such discharge by July 1, 1985, and to construct and operate by that time a Hyperion Heat Energy Recovery System (HERS) for the treatment of sludge. The question of the environmental effects on the ocean of the cessation of discharge of sludge to the Southern California Bight has been studied by scientists from the Southern California Coastal Water Research Project (SCCWRP) and by others. It is generally agreed that upon cessation of sludge discharge the heavily impacted area in the Santa Monica canyon would gradually, over several years, return to conditions more typical of less severely impacted areas in Santa Monica Bay. Diversity of bottom fauna would increase, and extent of occurrence of the pollution-tolerant polychaete Capitella capitata (a common pollution-indicator species) would be reduced (37).

After cessation of sludge discharge, bottom currents would gradually disperse much of the accumulated solid material near the outfall. The extent and volume of the sludge field would be reduced, with a concomitant reduction in the mass of heavy metals and synthetic organic substances. Uptake and oxidation of such substances by organisms will also be responsible for some reduction in pollutant levels.

A possible consequence of such events is a reduction in the incidence of demersal fish fin disease. Such fin erosion has been found near wastewater outfalls around the world. In the Southern California Bight, the disease is particularly common in Dover Sole in the vicinity of outfalls, including the Hyperion sludge outfall, where fin erosion has been found to occur in 10-30% of the Sole population (38). If this fin disease is related to the

presence of PCB's and other chlorinated compounds, as has been hypothesized, a rather slow rate of disappearance of the disease may be expected after cessation of sludge discharge, as the toxicants already present in the sediment may still be mobilized for some years thereafter. To the extent that the causative agent is still present in other wastewater discharges in the area, fin disease will not be eradicated. Conversely, if the responsible toxic agent is identified and sufficiently attenuated or removed from the wastewaters by pretreatment, a reduction in the fin erosion syndrome may be expected whether or not the discharge of sludge is halted.

The effect of the termination of sludge discharge on the overlying ocean waters is more uncertain, since the effects of sludge on the water column and its biota have not been as well characterized as on the sediment and benthic life forms. Immediately noticeable effects would include a reduction in turbidity and in concentrations of heavy metals in the water near the outfall.

As studies have failed to show any significant impact of the sludge outfall on the plankton community (38), termination of the discharge may not have a distinguishable effect on the plankton. It has been credibly proposed, however, that the reduction in nutrient input attendant on cessation of sludge discharge would significantly reduce the numbers of fish in the outfall area. As this area is used for sport fishing, there could be a reduction in fishing success at this site. Sport fishing craft would substitute other sites; the effect on the total catch is not possible to estimate, though the catch per hour of effort would likely decrease somewhat. Some loss of profits to operators of boats which have frequented the sludge outfall area is possible though not certain. It must be noted that fishing at wastewater outfall sites is prohibited by the Los Angeles Municipal Code; thus any economic loss as discussed here would result from a reduction in illegal activity.

Elevated levels of PCB's have been found in fish caught near the Hyperion sludge outfall. A lessened catch of fish from this area might be expected to lead to a lower risk of cancer in the population which consumes these fish, principally participants in sport fishing and their families. However, substitution of fish from other areas of Santa Monica Bay in the diet will likely not lead to a measurable reduction in the incidence of cancer. It has been shown that the risk to the Southern California fish-consuming population is and would remain approximately equal to the national average for persons with similar dietary habits (34).

Sludge discharged to Santa Monica Bay in past years (e.g. 10 years ago) contained far greater concentrations of PCB's and DDT than that which is currently discharged. Dischargers have therefore argued that continuation of discharge of the present-day less toxic sludge will serve to blanket the more highly toxic sludge particles on the ocean bottom, making the existing PCB's and DDT in the sediment less available to benthic organisms. Cessation of sludge discharge, they have maintained, would leave these toxicants more readily available, and thus more toxic, to the marine biota. This argument is of uncertain validity. The sludge outfall area

is one of active currents, occasional storm-related turbulence, and a high level of biological activity throughout the sedimentary layer. Resuspension of older sedimentary particles occurs continually. Upon cessation of sludge input to the area, dispersion of the toxicant-laden sedimentary particles would occur, resulting in the gradual reduction in such particles, and in the size of the sludge field as a whole. There is no firm evidence that continued sludge input would result in a neat "blanketing" of older sediment. Since the dischargers' own studies have indicated that the sludge field has reached approximate equilibrium in extent and mass, their finding of equilibrium input and output does not suggest a blanketing effect. It can be said for the argument advanced that continuation of discharge of the present "cleaner" sludge may result in less toxic conditions on the sea floor than in the recent past, but cannot be favorably compared with the result of termination of sludge input to the area.

A major consequence of the ban on sludge discharge to the ocean has been, and will continue to be, the necessity to find acceptable means and sites for disposal in the two alternate receiving media: air and land. (Disposal to fresh water is dismissed as being clearly unacceptable in California.)

An example of a combined air/land disposal option is the planned construction of the Hyperion HERS incineration plant, mentioned above. The requirement for this plant proceeds directly from the Ocean Plan's preclusion of the ocean disposal option, and from EPA's similar ban, based on their interpretation of federal environmental law. The expected environmental impacts of the HERS plant are reported in the final project EIS/EIR (41). In addition, and largely as a reaction to that report, the population of the region have expressed their views on the proposed plant through a series of resolutions by local governments opposing construction of the plant on such grounds as odor, air pollution, visual impact and financial cost (42). (It is estimated that capital costs associated purely with HERS would be somewhat over \$100 million, while the plant could break even on operating and maintenance costs, through the generation and sale of electric power (43)).

2. Revocation of Sludge Discharge Prohibition.

In the case that the prohibition on sludge discharge is withdrawn from the Ocean Plan, the State may expect renewed interest in this disposal option by several coastal communities. Their success in pursuing this option would depend in large measure on the outcome of the Congressional review and reauthorization of the Clean Water Act, and on EPA's interpretations and eventual position.

In effect, repeal of this prohibition would announce that the State Board considers the Water Quality Objectives and Limitations of the Ocean Plan's Tables A and B adequate protection for the ocean waters of the State. In fact, if strictly applied to all discharges, these limitations will effectively prohibit the discharge of sludge.

The practical effect of removal of the specific ban on sludge discharge, depending on federal actions, may be an increase in the number of requests to the State Board for waivers from effluent concentration limits, for the purpose of discharging sludge. To the extent that the State Board might grant much requests there would be environmental effects which will be considered in the next section.

Removal of the sludge discharge prohibition language from the Ocean Plan would not permit such discharge, but would leave a practical ban operating through the limitations of Tables A and B. The State Board would have, as is now the case, authority to grant waivers to permit sludge discharge.

3. Case-by-Case Policies.

The most meaningful alternative to 1) retaining the ban on sludge disposal, or 2) revoking this prohibition, would be based on a determination that the disposal of sludge is a waste management problem which deserves, in each case, a search for the most acceptable solution. Such a search would not preclude any alternatives at the outset, and would accept the solution determined upon study to be the most environmentally satisfactory in each case, be it disposal in the air, on land or at sea.

The environmental effects of this course of action will depend on the course of federal law and policy, and on the interest on the part of dischargers in thoroughly evaluating and submitting their waste management proposals. However, as this management policy calls specifically for thorough environmental impact evaluation in each individual case, it is the only alternative which can guarantee that total adverse impacts be minimized.

This alternative would clearly involve a shift of policy by the State Board. It would not, however, involve any change in the Board's long-held commitment to environmental protection. Selection of this option would rather indicate that overall environmental protection, rather than unqualified concentration on a single medium, is the most appropriate waste management policy. In this the Board would indicate its agreement with recent findings of EPA, with the NACOA committee and with the bulk of recent waste management research.

A practical consequence of selecting this option would likely be a reevaluation on the part of some coastal Sanitation Districts of their sludge management programs. In the event that Congress and EPA act on NACOA's recommendation to make ocean disposal of sludge a viable option, several of these districts could be expected to commence studies of their disposal options, followed in some cases by application to the State Board for a permit to discharge sludge to the ocean.

Evaluation by the State Board of such multi-media studies will be difficult, particularly in cases (such as the Los Angeles/Orange County Metropolitan Area) where two or more dischargers may apply for ocean disposal permits within a limited area. Both environmental impact assessments and eventual decisions by the State Board must here be of a regional nature.

Insofar as the State Board might grant permits to discharge sludge to the ocean under this policy alternative, some impact on ocean waters would occur. In areas where such disposal were permitted local depression of biological diversity would occur, as has been learned from the Hyperion sludge disposal site. Offsetting such local degradation, however, would be the assurance that where ocean disposal of sludge might be permitted this disposal method would have been found to represent the overall most environmentally acceptable alternative at that place and time.

Ocean disposal of sludge, where permitted under this policy alternative, should be considered an interim solution to the sludge management problem. Prior to permit expiration, a reevaluation in the light of changing technology, economic conditions and environmental impacts must be made. The goal of this or any waste management strategy must be disposition of wastes in a manner designed to minimize total adverse social, economic and environmental impacts.

Recommendations

It is recommended that a footnote be added to the Ocean Plan, setting forth the following:

- A. A statement affirming the Board's intent that sewage sludge residues shall be disposed of in the manner found in each case to have the least adverse impact on the total natural and human environment.
- B. Circumstances under which a Regional Board, with the concurrence of the State Board and EPA, may consider granting an interim permit for ocean disposal of sludge residues. The conditions for such consideration should include:
 1. An Environmental Impact Report which shows clearly that any available alternative disposal method would result in greater adverse impact on the natural or human environment than the proposed project.
 2. Other conditions as specified in Guidelines for Ocean Plan Implementation, to be published by the State Board.

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CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

WATER QUALITY CONTROL PLAN FOR
OCEAN WATERS OF CALIFORNIA
(Draft, January 1983)

INTRODUCTION

In furtherance of legislative policy set forth in Section 13000 of Division 7 of the California Water Code (Stats. 1969, Chap. 482) and pursuant to the authority contained in Section 13170 (Stats. 1971, Chap. 1288) the State Water Resources Control Board hereby finds and declares that protection of the quality of the ocean waters for use and enjoyment by the people of the State requires control of the discharge of waste (1) to ocean waters (2) in accordance with the provisions contained herein.

Originally adopted by the State Water Resources Control Board by Resolution No. 72-45 on July 6, 1972, and amended in 1973, 1978 and 1983.

CHAPTER I.
BENEFICIAL USES

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The beneficial uses of the ocean waters of the State that shall be protected include industrial water supply, recreation, esthetic enjoyment, navigation, and preservation and enhancement of fish, wildlife, and other marine resources or preserves.

CHAPTER II.
WATER QUALITY OBJECTIVES

This chapter sets forth limits or levels of water quality characteristics for ocean waters to ensure the reasonable protection of beneficial uses and the prevention of nuisance. The discharge of waste shall not cause violation of these objectives. (3,8)

A. Bacteriological Characteristics

1. Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas (4a) outside this zone used for body-contact sports, the following bacteriological objectives shall be maintained throughout the water column:

~~(a.) Samples of water from each sampling station shall have a concentration of coliform organisms less than 1,000 per 100 ml (10 per ml); provided that not more than 20 percent of the samples at any sampling station, in any 30-day period, may exceed 1,000 per 100 ml (10 per ml), and provided further that no single sample when verified by a repeat sample taken within 48 hours shall exceed 10,000 per 100 ml (100 per ml).~~

~~(b.)~~ The fecal coliform concentration (4b) based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200 per 100 ml nor shall more than 10 percent of the total samples during any 30-day period exceed 400 per 100 ml.

2. At all areas (4a) where shellfish may be harvested for human consumption, the following bacteriological objectives shall be maintained throughout the water column:

The median ~~total~~ fecal coliform concentration (4b) shall not exceed ~~70~~ 14 MPN per 100 ml, and not more than 10 percent of the samples shall exceed ~~200~~ 43 MPN per 100 ml.

B. Physical Characteristics

1. Floating particulates and grease and oil shall not be visible.
2. The discharge of waste shall not cause esthetically undesirable discoloration of the ocean surface.
3. ~~The transmittance of natural~~ Downwelling ambient light shall not be significantly (5) reduced at any point outside the initial dilution zone, (6) as the result of the discharge of waste.

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Chapter II. 8.

4. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are unreasonably degraded. (7)

C. Chemical Characteristics

1. The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally, as the result of the discharge of oxygen demanding waste materials.
2. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
3. The dissolved sulfide concentration of waters in and near sediments shall not be significantly (5) increased above that present under natural conditions.
4. The concentration of substances set forth in Chapter IV, Table 8, in marine sediments shall not be increased to levels which would unreasonably degrade (7) indigenous biota.
5. The concentration of organic materials in marine sediments shall not be increased ~~above that~~ to levels which would unreasonably degrade (7) marine life.
6. Nutrient materials shall not cause objectionable aquatic growth or unreasonably degrade (7) indigenous biota. }

D. Biological Characteristics

1. Marine communities, including vertebrate, invertebrate, and plant species, shall not be unreasonably degraded. (7)
2. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

E. Radioactivity

1. Radioactivity shall not exceed the limits specified in Title 17, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30269 of the California Administrative Code.

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CHAPTER III GENERAL REQUIREMENTS FOR MANAGEMENT OF WASTE DISCHARGE TO THE OCEAN

- A. Waste management systems that discharge to the ocean must be designed and operated in a manner that will maintain the indigenous marine life and a healthy and diverse marine community.
- B. Waste discharged to the ocean must be essentially free of:
 1. material that is floatable or will become floatable upon discharge,
 2. settleable material or substances that may form sediments which will unreasonably degrade (7) benthic communities or other aquatic life,
 3. substances toxic to marine life due to increases in concentrations in marine waters or sediments, substances which will accumulate to toxic levels in marine waters, sediments or biota, (14)
 4. substances that significantly decrease the natural light to benthic communities and other marine life, and
 5. materials that result in esthetically undesirable discoloration of the ocean surface.
- C. Waste effluents shall be discharged in a manner which provides sufficient initial dilution to minimize the concentrations of substances not removed in treatment.
- D. Location of waste discharges must be determined after a detailed assessment of the oceanographic characteristics and current patterns to assure that:
 1. pathogenic organisms and viruses are not present in areas where shellfish are harvested for human consumption or in areas used for swimming or other body-contact sports. (9)
 2. natural water quality conditions are not altered in areas designated as being of special biological significance, and
 3. maximum protection is provided to the marine environment.

CHAPTER IV. QUALITY REQUIREMENTS FOR WASTE DISCHARGES (EFFLUENT QUALITY REQUIREMENTS)

This chapter sets forth the quality requirements for waste discharge to the ocean. (3)

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Chapter IV.

Table A limitations apply only to publicly owned treatment works and industrial discharges for which Effluent Limitations Guidelines have not been established pursuant to Sections 301, 302, 304, or 306 of the Federal Water Pollution Control Act of 1972.

Table B limitations apply to all discharges within the jurisdiction of this Plan.

Table A limitations, and effluent concentrations calculated from Table B limitations, shall be applied as gross, not net, effluent limitations.

The State Board is authorized to administer and enforce effluent requirements established pursuant to the Federal Water Pollution Control Act of 1972. Effluent limitations established under Sections 301, 302, 306, 307, 316, 403, and 405 of the aforementioned Federal Act and administrative procedures pertaining thereto are included in this Plan by reference.

Compliance with Table A limitations, or Environmental Protection Agency Effluent Limitations Guidelines for industrial discharges, based on Best Practicable Control Technology, shall be the minimum level of treatment acceptable under this Plan, and shall define reasonable treatment and waste control technology.

TABLE A
MAJOR WASTEWATER CONSTITUENTS AND PROPERTIES

	Unit of measurement	Maximum Limiting Effluent Concentrations		
		Monthly (30 day Average)	Weekly (7 day Average)	Maximum at any time
Grease and Oil	mg/l	25	40	75
Suspended Solids (30 day average)	mg/l	25 Percent Removal 60 mg/l or 75 Percent Removal, whichever is higher. (15)		
Settleable Solids	ml/l	1.0	1.5	3.0
Turbidity	JTU	75	100	225
pH	units	within limits of 6.0 to 9.0 at all times		
Toxicity Concentration (12) tu		1.5	2.0	2.5

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Chapter IV.

TABLE B
TOXIC MATERIALS LIMITATIONS

Effluent limitations shall be imposed in a manner prescribed by the State Board (10) such that the concentrations set forth below as water quality objectives shall not be exceeded in the receiving water upon completion of initial dilution, except that limitations indicated for ~~total chlorinated pesticides and PCB's~~ and Radioactivity shall apply directly to the undiluted waste effluent.

Limiting Concentrations

	<u>Unit of Measurement</u>	<u>6-Month Median</u>	<u>Daily Maximum</u>	<u>Instantaneous Maximum</u>
Arsenic	ug/l	8	32	80
Cadmium	ug/l	3	12	30
Total Chromium (Cr+6)	ug/l	2	8	20
Copper	ug/l	5	20	50
Lead	ug/l	8	32	80
Mercury	ug/l	0.14	0.56	1.4
Nickel	ug/l	20	80	200
Silver	ug/l	0.45	1.8	4.5
Zinc	ug/l	20	80	200
Cyanide	ug/l	5	20	50
Total Chlorine Residual (continuous sources)	ug/l	2	11	124
(For intermittent chlorine sources, see footnote 11.)				
Ammonia (expressed as nitrogen)	ug/l	600	2,400	6,000
Toxicity Concentra- tion (12)	tu	0.05	-	-
Phenolic Compounds (non-chlorinated)	ug/l	30	120	300
Chlorinated Phenolics	ug/l	1	4	10
Aldrin and Dieldrin	ug/l	0.002	0.004	0.006
Chlordane and Related Compounds (13)	ug/l	0.003	0.006	0.009
DDT and Derivatives (13)	ug/l	0.001	0.002	0.003
Endrin	ug/l	0.002	0.004	0.006
HCH (13)	ug/l	0.004	0.008	0.012
PCB's	ug/l	0.003	0.006	0.009
Toxaphene	ug/l	0.007	0.014	0.021
Total Chlorinated Pesticides and PCB's (13)	mg/l	0.002	0.004	0.006
Radioactivity		Not to exceed limits specified in Section 30269 of the California Administrative Code.		

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CHAPTER V.
DISCHARGE PROHIBITIONS

A. Hazardous Substances

The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste into the ocean is prohibited.

B. Areas of Special Biological Significance

Waste shall be discharged a sufficient distance from areas designated as being of special biological significance to assure maintenance of natural water quality conditions in these areas.

C. Sludge

The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, shall be prohibited, except as provided in footnote 16 to this Plan. The discharge of sludge digester supernatant directly to the ocean, or into a waste stream that discharges to the ocean without further treatment shall be prohibited, except as provided in footnote 16 to this Plan.

D. By-Passing

The by-passing of untreated wastes containing concentrations of pollutants in excess of those of Table A or Table B to the ocean is prohibited.

CHAPTER VI.
GENERAL PROVISIONS

A. Effective Date

This Plan is in effect as of the date of adoption by the State Water Resources Control Board.

B. Waste Discharge Requirements

The Regional Boards may establish more restrictive water quality objectives and effluent quality requirements than those set forth in this Plan as necessary for the protection of beneficial uses of the ocean waters.

Regional Boards may impose alternative less restrictive provisions than those contained within Table B of the Plan, provided an applicant can demonstrate that:

Reasonable control technologies (including source control, material substitution, treatment and dispersion) will not provide for complete compliance; or

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Chapter VI. B

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Any less stringent provisions would encourage water reclamation;

Provided further that:

- a) Any alternative water quality objectives shall be below the conservative estimate of chronic toxicity, upon which this Plan is based as given in "Guidelines for Ocean Plan Implementation" which shall be issued by the Executive Director of the State Board, and such alternative will provide for adequate protection of the marine environment;
- b) A receiving water toxicity objective of 0.05 tu is not exceeded; and
- c) The State Board and the Environmental Protection Agency concur in the Regional Board findings and alternative limits.

C. Revision of Waste Discharge Requirements

The Regional Board shall revise the waste discharge requirements for existing discharges as necessary to achieve compliance with this Plan and shall also establish a time schedule for such compliance. ~~in accordance with State Board Resolution 74-5.~~

~~D. State Board Review of Time Schedules~~

~~The State Board shall review proposed time schedules for all municipal discharges throughout the State and shall recommend to the Regional Boards specific schedules to assure the maximum benefit from, and equitable distribution of, available state and federal grant funds.~~

~~E.D. Monitoring Program~~

The Regional Board shall require dischargers to conduct self-monitoring programs and submit reports necessary to determine compliance with the waste discharge requirements, and may require dischargers to contract with agencies or persons acceptable to the Regional Board to provide monitoring reports. Such monitoring programs shall comply with Guidelines for Monitoring the Effects of Waste Discharges on the Ocean which shall be issued by the Executive Director of the State Board. (14)

~~F.E. Areas of Special Biological Significance~~

Areas of special biological significance shall be designated by the State Board after a public hearing by the Regional Board and review of its recommendations.

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Chapter VI.

G.F. State Board Exceptions to Plan Requirements

The State Board may, subsequent to a public hearing, and with the concurrence of the Environmental Protection Agency, grant exceptions to any provision of this Plan where the Board determines:

- 1) The existence of unusual circumstances not anticipated at the time of the Plan's adoption;
- 2) The exception will not compromise protection of ocean waters for beneficial uses, and
- 3) The public interest will be served.

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FOOTNOTES

- (1) This Plan is applicable, in its entirety, to point source discharges to the ocean. Nonpoint sources of waste discharges to the ocean are subject to Chapter I - Beneficial Uses, Chapter II - Water Quality Objectives, Chapter III - General Requirements, Chapter IV - Table B (wherein compliance with water quality objectives shall, in all cases, be determined by direct measurements in the receiving waters), and Chapter V - Discharge Prohibitions.

This Plan is not applicable to discharges to enclosed bays and estuaries or inland waters nor is it applicable to vessel wastes, and the control of dredging spoil.

Provisions regulating the thermal aspects of waste discharged to the ocean are set forth in the Water Quality Control Plan for the Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California Dated May 18, 1972.

- (2) Ocean waters are the territorial marine waters of the Pacific Ocean ~~adjacent to the California coast~~ State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. If a discharge outside the territorial waters of the State could affect the quality of the waters of the State, the discharge may be regulated to assure no violation of the Ocean Plan will occur in ocean waters.

Enclosed bays are indentations along the coast which enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. This definition includes but is not limited to: Humboldt Bay, Bodega Harbor, Tomales Bay, Drakes Estero, San Francisco Bay, Morro Bay, Los Angeles Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay.

Estuaries and coastal lagoons are waters at the mouths of streams which serve as mixing zones for fresh and ocean waters during a major portion of the year. Mouths of streams which are temporarily separated from the ocean by sandbars shall be considered as estuaries. Estuarine waters will generally be considered to extend from a bay or the open ocean to the upstream limit of tidal action but may be considered to extend seaward if significant mixing of fresh and salt water occurs in the open coastal waters. The waters described by this definition include but are not limited to the Sacramento-San Joaquin Delta as defined by Section 12220 of the California Water Code, Suisun Bay, Carquinez Strait downstream to Carquinez Bridge, and appropriate areas of the Smith, Klamath, Mad, Eel, Noyo, and Russian Rivers.

- (3) The Water Quality Objectives and Effluent Quality Requirements are defined by a statistical distribution when appropriate. This method recognizes the normally occurring variations in treatment efficiency and sampling and analytical techniques and does not condone poor operating practices.

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Footnotes (continued)

- (4a) Body-contact sports areas outside the shoreline zone set forth in Chapter II, A.1., and all shellfishing areas shall be determined by the Regional Board on an individual basis; except that kelp bed habitats shall be considered shellfish harvesting areas unless otherwise designated by the Regional Board.
- (4b) The multiple-tube fermentation technique as described in "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (40 CFR 136) shall be used to determine bacteriological concentrations. Where an applicant can demonstrate the equivalence of an alternate method (e.g. membrane filter technique) the Regional Board may permit substitution of such method.
- (5) A significant difference is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.
- (6) Initial dilution is the process which results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge.

For a submerged buoyant discharge, characteristic of most municipal and industrial wastes that are released from the submarine outfalls, the momentum of the discharge and its initial buoyancy act together to produce turbulent mixing. Initial dilution in this case is completed when the diluting wastewater ceases to rise in the water column and first begins to spread horizontally.

For shallow water submerged discharges, surface discharges, and nonbuoyant discharges, characteristic of cooling water wastes and some individual discharges, turbulent mixing results primarily from the momentum of discharge. Initial dilution, in these cases, is considered to be completed when the momentum induced velocity of the discharge ceases to produce significant mixing of the waste, or the diluting plume reaches a fixed distance from the discharge to be specified by the Regional Board, whichever results in the lower estimate for initial dilution.

For the purpose of this Plan, minimum initial dilution is the lowest average initial dilution within any single month of the year. Dilution estimates shall be based on observed waste flow characteristics, observed receiving water density structure, and the assumption that no currents, of sufficient strength to influence the initial dilution process, flow across the discharge structure.

The Executive Director shall issue guidelines to be used by the State and Regional Boards for determining the initial dilution achieved by each ocean discharge.

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Footnotes (continued)

- (7) Degradation shall be determined by analysis of the effects of waste discharge on species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Regional Boards shall weigh effects on ocean waters against other appropriate factors in determining unreasonable degradation.
- (8) Compliance with the water quality objectives of Chapter II shall be determined from samples collected at stations representative of the area within the waste field where initial dilution is completed.
- (9) Waste that contains pathogenic organisms or viruses should be discharged a sufficient distance from shell fishing and body-contact sports areas to maintain applicable bacteriological standards without disinfection. Where conditions are such that an adequate distance cannot be attained, reliable disinfection in conjunction with a reasonable separation of the discharge point from the area of use must be provided. Consideration should be given to disinfection procedures that do not increase effluent toxicity and that constitute the least environmental and human hazard in their production, transport, and utilization.
- (10) Effluent limitations for substances identified in Chapter IV, Table B, with the exception of Radioactivity and ~~Total Identifiable Chlorinated Hydrocarbons~~, shall be determined through the use of the following equation:

$$C_e = C_o + D_m (C_o - C_s) \quad (1)$$

where:

C_e = the effluent concentration limit,
 C_o = the concentration to be met at the completion
of initial dilution,
 C_s = background seawater concentration (see Table below),
 D_m = minimum probable initial dilution expressed
as parts seawater per part wastewater.

The State Board shall assist the Regional Boards in the evaluation of D_m , the minimum initial dilution for a specific waste discharge. Discharging agencies will be informed of the basis for the determination of minimum initial dilution.

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Footnotes (continued)

<u>Waste Constituent</u>	<u>Cs ug/l</u>
Arsenic	3
Cadmium	0
Total Chromium (Cr+6)	0
Copper	2
Lead	0
Mercury	0.06
Nickel	0
Silver	0.16
Zinc	8
Cyanide	0
Phenolic Compounds	0
Total Chlorine Residual	0
Ammonia (Expressed as nitrogen)	0
Toxicity Concentration (in toxic units)	0
<u>Chlorinated Pesticides and PCB's</u>	0

The six-month median effluent concentration limit shall apply as a moving median of daily values for any 180 day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered to equal zero for days on which no discharge occurred.

The daily maximum effluent concentration limit shall apply to flow weighted concentrations within 24 hours.

The instantaneous maximum shall apply to grab sample determinations.

Discharge requirements shall also specify effluent requirements in terms of mass emission rate limits utilizing the general formula:

$$\text{lbs/day} = 8.34 \times C_e \times Q \quad (2)$$

The six-month median limit on daily mass emissions shall be determined using the six-month median effluent concentration as C_e and the observed flow rate Q in millions of gallons per day. The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as C_e and the observed flow rate Q in millions of gallons per day.

Any significant change in waste flow shall be cause for reevaluating effluent quality requirements.

If a calculated C_e value falls below the limit of detection of the test method specified in the Code of the Federal Register, 40 CFR 136 the limit of detection shall serve as the limiting effluent concentration.

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Footnotes (continued)

The State or Regional Board may, at their discretion, specify test methods which are more sensitive than those specified in 40 CFR 136. Total chlorine residual is likely to be a "limit of detection" effluent requirement in many cases. The limit of detection of total chlorine residual in standard test methods is less than, or equal to, 20 ug/l.

Due to the large total volume of powerplant and other heat exchange discharges, special procedures must be applied for determining compliance with Table B limitations on a routine basis. Effluent concentration values (Ce) shall be determined through the use of Equation 1 considering the minimal probable initial dilution of the combined effluent (in-plant waste streams plus cooling water flow). These concentration values shall then be converted to mass emission limitations as indicated in Equation 2. The mass emission limits will then serve as requirements applied to all in-plant waste streams taken together which discharge into the cooling water flow. The procedure described above shall apply to all Table B materials except limitations on total chlorine residual and radioactivity which shall apply to, and be measured in, the combined final effluent.

- (11) Water quality objectives for total chlorine residual, applying to intermittent discharges not exceeding two hours, ~~and 24 hours and instantaneous (1 minute) maximum objective applying to continuous sources,~~ shall be determined from the following equation:

$$\log y = -0.33 (\log x) - 0.9$$

where: y = the water quality objective to apply when chlorine is being discharged;
x = the duration of uninterrupted chlorine discharge in minutes.

- (12) This parameter shall be used to measure the acceptability of waters for supporting a healthy marine biota until improved methods are developed to evaluate biological response.

a. Toxicity Concentration (Tc)

Expressed in Toxicity Units (tu)

$$Tc (tu) = \frac{100}{96\text{-hr. TLm\%}}$$

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Footnotes (continued)

Median Tolerance Limit (TLM%)

The TLM shall be determined by static or continuous flow bioassay techniques using standard test species. If specific identifiable substances in wastewater can be demonstrated by the discharger as being rapidly rendered harmless upon discharge to the marine environment, the TLM may be determined after the test samples are adjusted to remove the influence of those substances.

When it is not possible to measure the 96-hr. TLM due to greater than 50 percent survival of the test species in 100 percent waste, the toxicity concentration shall be calculated by the expression:

$$T_c (tu) = \frac{\log (100 - S)}{1.7}$$

S = percentage survival in 100% waste.

If S > 99, Tc shall be reported as zero.

- (13) ~~Total chlorinated pesticides and PCB's shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, and polychlorinated biphenyls.~~

~~The Executive Director shall undertake a preliminary investigation into the presence and hazards posed by the other halogenated hydrocarbons which may be present in wastewater discharges. Such review shall lead to a recommendation regarding the necessity for regulation, gathering of necessary data, or other appropriate actions which should be taken by the State Board.~~

~~As part of the preliminary investigation, the Executive Director may impose additional monitoring requirements on discharging agencies to assess the occurrence of halogenated hydrocarbons other than those specifically mentioned in this Plan.~~

"Chlordane and Related Compounds" shall mean the sum of Chlordane (cis + trans), trans-nonachlor, oxychlordane, Heptachlor and Heptachlor epoxide. "DDT and derivatives" shall mean the sum of the p,p' and o,p' isomers of DDT, DDD (TDE) and DDE. HCH shall mean the sum of the α , β , γ (Lindane) and δ isomers of hexachlorocyclohexane.

- (14) Increased tissue burdens of conservative toxicants in marine biota may be determined using caged bivalves transplanted to the discharge zone. Results of the pollutant uptake monitoring shall be interpreted on a case by case basis and shall be used at the discretion of the Regional Board.

Water Quality Control Board
Ocean Waters of California

DRAFT

Footnotes (continued)

- (15) Dischargers shall remove 75% of suspended solids contained in the influent before discharging wastewaters to the ocean, except that when influent levels of suspended solids are below 240 mg/l the effluent limitation shall be 60 mg/l.

Recognizing that ideal limitations on suspended solids will be based on the characteristics of the individual discharge and receiving waters, Regional Boards are encouraged to individualize the limitation as follows: The 75% removal requirement shall not be changed, but Regional Boards may adjust the lower concentration limit (the 60 mg/l in table A) to suit the oceanographic, ecological and effluent characteristics of each discharge.

Guidance on establishing such limitations, and on calculating compliance, will be found in "Guidelines for Ocean Plan Implementation," which shall be issued by the Executive Director of the State Board.

- (16) It is the policy of the State of California that disposal of sewage sludge shall be carried out in the manner found to have the least adverse impact on the total natural and human environment. The State Board recognizes that the preferred disposal method may vary among localities and times, and that sludge may upon study be found to be most favorably disposed of on land, in the air or at sea, or in a combination of these media. The State Board, however, considers the ocean disposal of sludge, if permitted, to be an interim measure, to be practiced only until more acceptable methods of disposal are developed.

The State and Regional Boards will not consider application for permits to discharge sewage sludge to ocean waters, except where an Environmental Impact Report shows clearly that any available alternative disposal method will have a greater adverse impact on the natural or human environment than the proposed project. No such application will be considered where it is found that federal law or regulation prohibits the proposed discharge. Further guidance will be found in "Guidelines for Ocean Plan Implementation" which shall be issued by the Executive Director of the State Board.

Mr. D'AMOURS. Would you pull the microphone a little bit closer to you? It might help.

Mr. HARPER. Yes.

CCA is committed to vastly improved monitoring of the effects of ocean disposal of sludge. We have been working with the National Oceanic and Atmospheric Administration to develop regional monitoring programs around the country. We will continue to work with NOAA and EPA to produce a solid data base so that rational answers can be found to the increasingly difficult problem of disposing of the sludges we produce.

It is CCA's position that sewage sludge should be managed in the way that will minimize environmental harm and risks to human health and can be accomplished within rational economic limits. It is not possible to single out a single medium, whether it be the atmosphere, the ocean, or the land, and state flatly that the human environmental risk associated with sludge disposal in that medium will always be greater than any other alternative.

Each region of the country has its own set of unique problems and circumstances. The quality of sludge produced by sewage agencies is not uniform. However, we are required to develop pretreatment programs under the Clean Water Act to reduce toxic levels to acceptable limits. Although the implementation can be difficult and expensive, we are making progress.

We in Orange County have seen dramatic results in the reduction of heavy metals in our sludge as a result of our work with industrial concerns in our area. I have some graphs demonstrating the reduction of certain materials over the past 5 years, and would like to have them placed in the hearing record following my testimony, if this is agreeable with the subcommittee.

Mr. D'AMOURS. Without objection, it is so ordered.

Mr. HARPER. CCA supports H.R. 1761 and we do not see any reason for major changes in the act at this time. It makes sense to us in light of the status of the rulemaking activities at EPA for Congress to enact a straight reauthorization of the act without substantial changes.

When some progress has been made on the site designation question, there will be ample opportunity for indepth discussions of what took place and what changes in the MPRSA may be appropriate in light of the situation at that time.

This concludes my formal remarks, Mr. Chairman. I will be happy to respond to any questions you might have.

[The statement of Mr. Harper follows:]

PREPARED STATEMENT OF FRED A. HARPER, CHAIRMAN, CONFERENCE OF COASTAL AGENCIES, A COMMITTEE OF THE ASSOCIATION OF METROPOLITAN SEWERAGE AGENCIES

Good day, Mr. Chairman and members of the Subcommittees. My name is Fred Harper and I am the General Manager of the County Sanitation Districts of Orange County, California. I am speaking to you today in my capacity as the Chairman of the Conference of Coastal Agencies (CCA), a group of 17 coastal sewerage agencies on the east and west coasts of the country. CCA is a committee of the Association of Metropolitan Sewerage Agencies, an association of nearly 90 major municipal sewerage agencies—whose members serve over 70 million people in the nation's major metropolitan areas.

I am pleased to appear before these Subcommittees again; this makes our third appearance here since CCA was formed nearly two years ago. From the Northeast, our six members are the South Essex Sewerage District (MA), New York City's De-

partment of Environmental Protection, Nassau and Westchester Counties, New York, Middlesex County Utilities Authority and Passaic Valley Sewerage Commissioners, both of New Jersey. In the Mid-Atlantic area we have three members, Baltimore and Anne Arundel Counties, MD, and Hampton Roads Sanitation District (VA). Six California agencies are CCA members: San Diego, Encina, Orange County, the City of Los Angeles, the City and County of San Francisco, and the East Bay Municipal Utility District. In the Northwest we count two more members, Tacoma, Washington, and Anchorage, Alaska.

1. CCA'S OBJECTIVES

CCA member agencies are local governmental agencies which were established to protect public health and the environment; these are our foremost concerns. Furthermore, we are public agencies spending the public's dollars, and we have an obligation to seek the most cost-effective methods to attain the levels of protection that Congress and our State legislatures decree. In the past decade, occasional conflicts and inconsistencies have arisen between environmental laws that are intended to protect individual media: air, land, surface water, ground water, or the oceans.

The medium-by-medium approach to environmental regulation came about in part because of the various specific environmental laws which were enacted with primary focus on one area of environmental concern, such as the Clean Water Act, the Clean Air Act and the Marine Protection Research and Sanctuaries Act. Moreover, under the Congressional Committee system, no single Committee has broad enough jurisdiction to look at waste management as a whole. During the past five years, two "blue-ribbon" panels criticized the medium-by-medium approach to waste management, and sewage sludge management specifically. They both recommended that a new approach be implemented that would result in the treatment and placement of waste materials in the medium, and in the manner, that minimizes the risk to human health and environmental degradation. The first of these reports was the 1978 report of the National Academy of Sciences/National Research Council entitled *Multimedia Management of Municipal Sludge*. The most recent report is that of the National Advisory Committee on Oceans and Atmosphere (NACOA), dated January 1981 and entitled *The Role of the Oceans in a Waste Management Strategy*. The Conference of Coastal Agencies strongly supports the recommendations in those two reports, and we believe they offer useful ideas for consideration by these Subcommittees and the Congress.

In general, the scientific community has shifted its view within the past few years and now believes we must do a better job of monitoring the impacts of disposing of sludge and other materials in the ocean. My own State of California, which has had a total ban on ocean disposal of sludge for many years, has within the past few months indicated a willingness to include the ocean in options to be examined and considered in disposing of sludge.

CCA is committed to vastly improved monitoring of the effects of placing sludge in the ocean and has been working with the National Oceanic and Atmospheric Administration to develop regional monitoring programs. The reports I referred to earlier noted the lack of solid scientific data upon which to base national policies in this difficult and emotional subject of sludge and the ocean. We will continue to work with NOAA and EPA to produce a solid data base so that rational answers can be found to the increasingly difficult problem of disposing of the sludge we produce.

It is CCA's position that sewage sludge should be managed in the way that will minimize environmental harm and risks to human health, and can be accomplished within rational economic limits. It is not possible to single out a single medium, whether it be the atmosphere, the ocean, or the land, and state flatly that the human and environmental risks associated with sludge disposal in that medium will always be greater than any other alternative. In considering the management of sewage sludge, it is necessary to recognize that there are potential benefits from the wise use of this material. It is incorrect to speak solely of sludge "disposal," since in fact in many sections of the country we are deriving benefits from sludge management today. If the wise and prudent use of nutrients in sludge produces benefits on land, benefits to our marine life can also result from the same prudent application of sludge in the ocean.

Regrettably, the general public perceives sewage sludge in negative terms. When Congress passed the Marine Protection, Research and Sanctuaries Act in 1972, and again when the statute was amended by this Committee in 1977, it properly prohibited the placement of sewage sludge in the ocean if it would "unreasonably degrade or endanger" the environment or human health. This language recognizes that

there will be some sludges, and some locations, where no such unreasonable degradation or endangerment would result.

Each region of the country has its own set of unique problems and circumstances. What is the best sludge management plan for New York City may not work for Los Angeles. The type of land available, the existing land use patterns, and the existing air pollution problems, along with the underlying physical processes governing air and water circulation, all have to be considered in determining which sludge management option is the best. The quality of sludge produced by sewerage agencies is not uniform. Obviously, those with greater industrial users in their service areas have sludges which contain higher levels of synthetic organic chemicals and heavy metals. We are already required to develop pretreatment programs by the Clean Water Act which will reduce those levels to acceptable limits. And although the implementation can be difficult and expensive, we are making progress. We in Orange County have seen dramatic results in the reduction of heavy metals in our sludge as a result of our work with industrial concerns in our area. I have some graphs demonstrating the reduction of certain materials and would like to have them placed in the hearing record following my testimony, if that is agreeable to the Subcommittees.

II. THE PRESENT LEGISLATIVE SITUATION

The last Congress failed to reauthorize the Marine Protection, Research and Sanctuaries Act, even though the Merchant Marine and Fisheries Committee, and the House of Representatives, approved a bill which would have done so. In our testimony last year we opposed drastic changes to the Act, but strongly supported proposals to increase the quality of research on regional marine pollution problems. The bill introduced by Congressman D'Amours this year, H.R. 1761, is essentially the same bill that passed the House last year minus the radioactive waste provisions which were enacted as an amendment to another bill last year. We do not see any reason for major changes in the Act at this time and support H.R. 1761. The Environmental Protection Agency currently has a site designation rulemaking out for comment, and we understand that the Agency still plans to promulgate regulations to implement the decision by Judge Sofaer (*New York City v. EPA*). We believe the time to change the law, if changes are called for, would be after the site designation and generic rulemakings have been completed. Several CA members have been working for over a year to put their positions on the record in the matter of the New York Bight site designation rulemaking. Any changes in the statutory authority at this time could well result in further delay of the already-slow resolution of these questions.

It makes sense to us, in light of the status of these rulemaking activities at EPA, for Congress to enact a straight reauthorization of the Act, without substantive changes. When some progress has been made on the site designation question, probably by the end of the summer, there will be ample opportunity for in-depth discussions of what took place and what changes in the MPRSA may be appropriate in light of the situation at that time.

This concludes my formal remarks, Mr. Chairman. I will be happy to respond to questions.

**RESULTS OF THE DISTRICTS
INDUSTRIAL PRETREATMENT PROGRAM
INSTITUTED JULY 1, 1976**

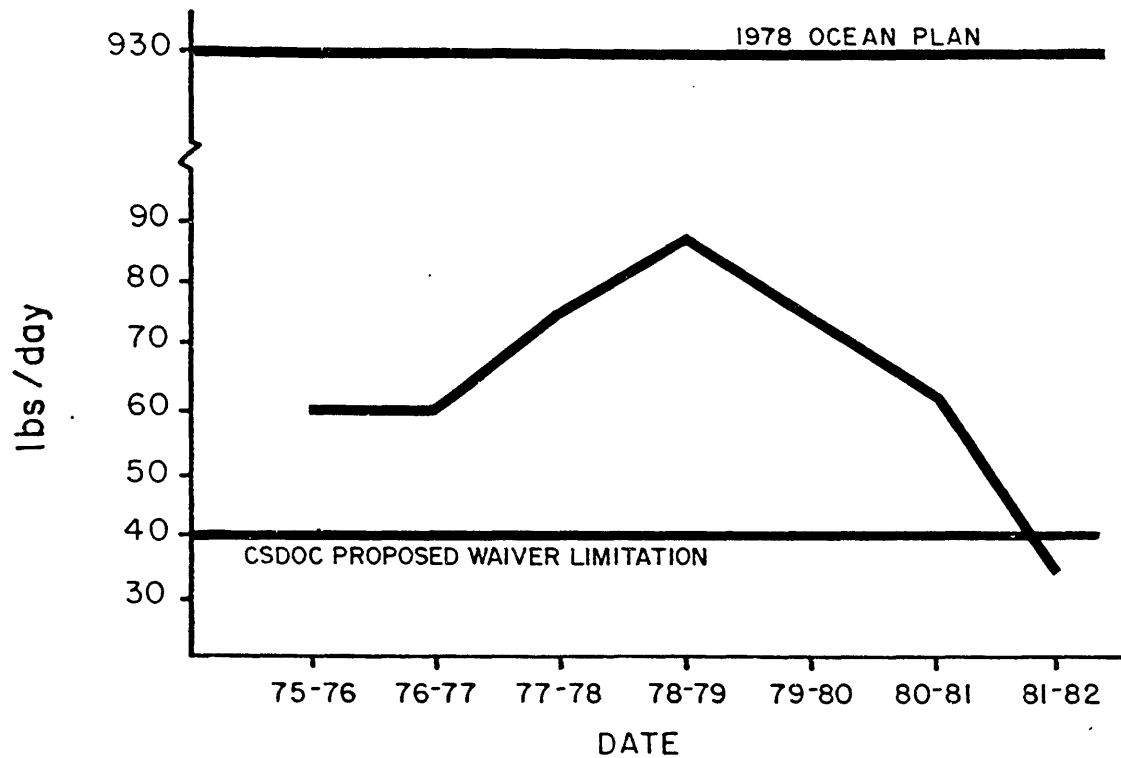
**COUNTY SANITATION DISTRICTS
OF
ORANGE COUNTY, CALIFORNIA
DISTRICTS 1,2,3,5,6,7 AND 11**



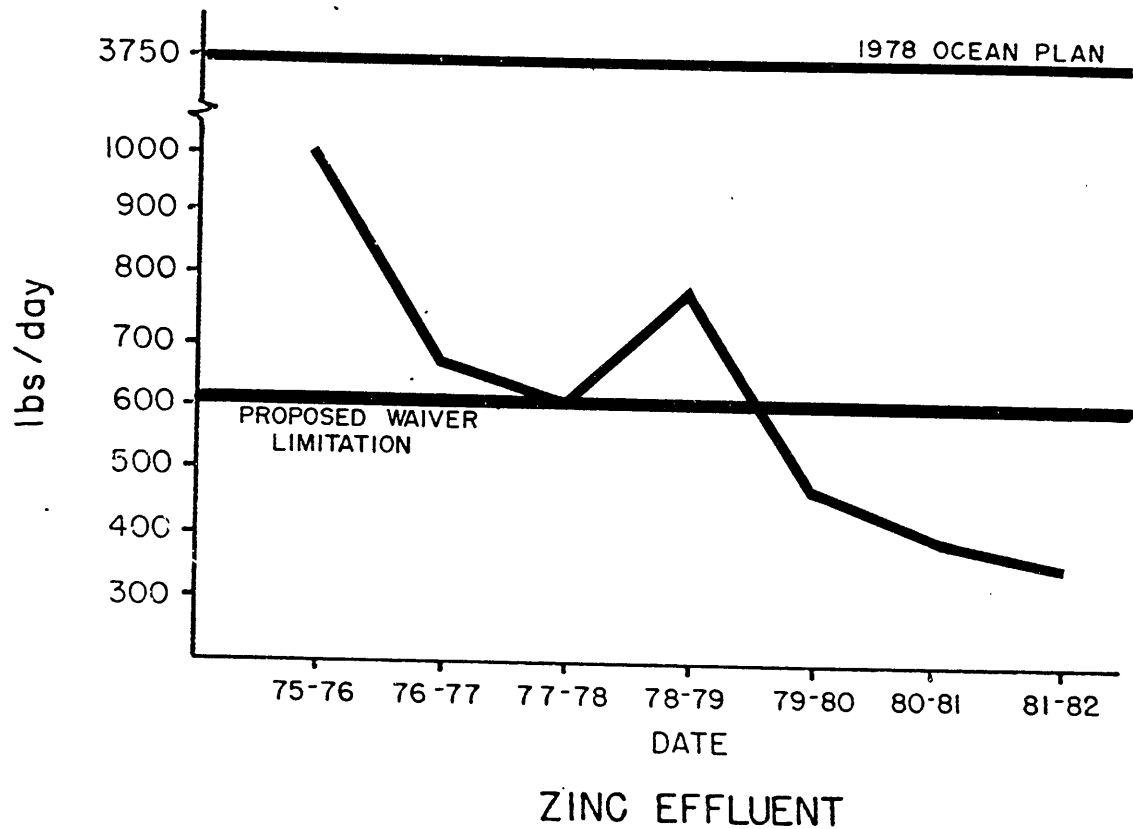
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FOUNTAIN VALLEY, CALIFORNIA 92708
(714) 540-2910

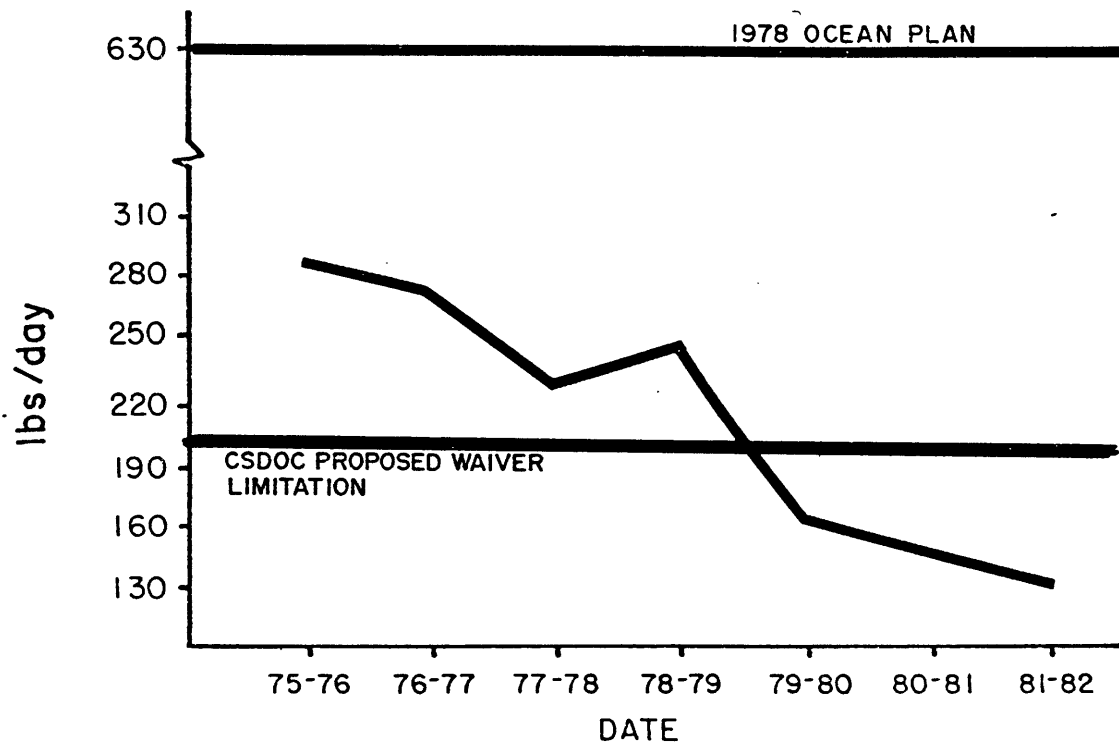
BASIC ELEMENTS OF
ORANGE COUNTY SANITATION DISTRICTS'
SUCCESSFUL INDUSTRIAL PRETREATMENT PROGRAM

- ORDINANCE PREPARED IN COOPERATION WITH REPRESENTATIVES FROM INDUSTRY, MANUFACTURERS ASSOCIATIONS AND CHAMBERS OF COMMERCE
- THREE-PHASE IMPLEMENTATION APPROACH
 - . PHASE I (JULY 1, 1976) - REQUIRED "GOOD HOUSEKEEPING" PRACTICES BY INDUSTRY
ALLOWED TIME FOR SOURCE CONTROL PLANS TO BE DEVELOPED
 - . PHASE II (JULY 1, 1978) - REQUIRED INSTALLATION OF PRETREATMENT FACILITIES WITH
LIMITS TO MEET CALIFORNIA OCEAN PLAN REQUIREMENTS
 - . PHASE III (JULY 1, 1983) - REQUIRES ADDITIONAL PRETREATMENT FACILITIES BY INDUSTRY
TO MEET ALL APPLICABLE REQUIREMENTS
- PERMIT LIMITS BASED ON MASS EMISSION ENCOURAGES INDUSTRY TO CONSERVE WATER.
SINCE ENACTMENT OF ORDINANCE INDUSTRY HAS GROWN BY 36 PERCENT BUT WATER CONSUMPTION
HAS BEEN REDUCED BY 5 MILLION GALLONS PER DAY
- ACTIVE ENFORCEMENT PROGRAM BY DISTRICTS' INDUSTRIAL WASTE DEPARTMENT
 - . FREQUENT SAMPLING OF INDUSTRY BY DISTRICTS' PERSONNEL
 - . SAMPLE AND EVALUATION PROGRAM
 - . ENFORCEMENT COMPLIANCE SCHEDULE AGREEMENTS
 - . CEASE AND DESIST
 - . PERMIT REVOCATION

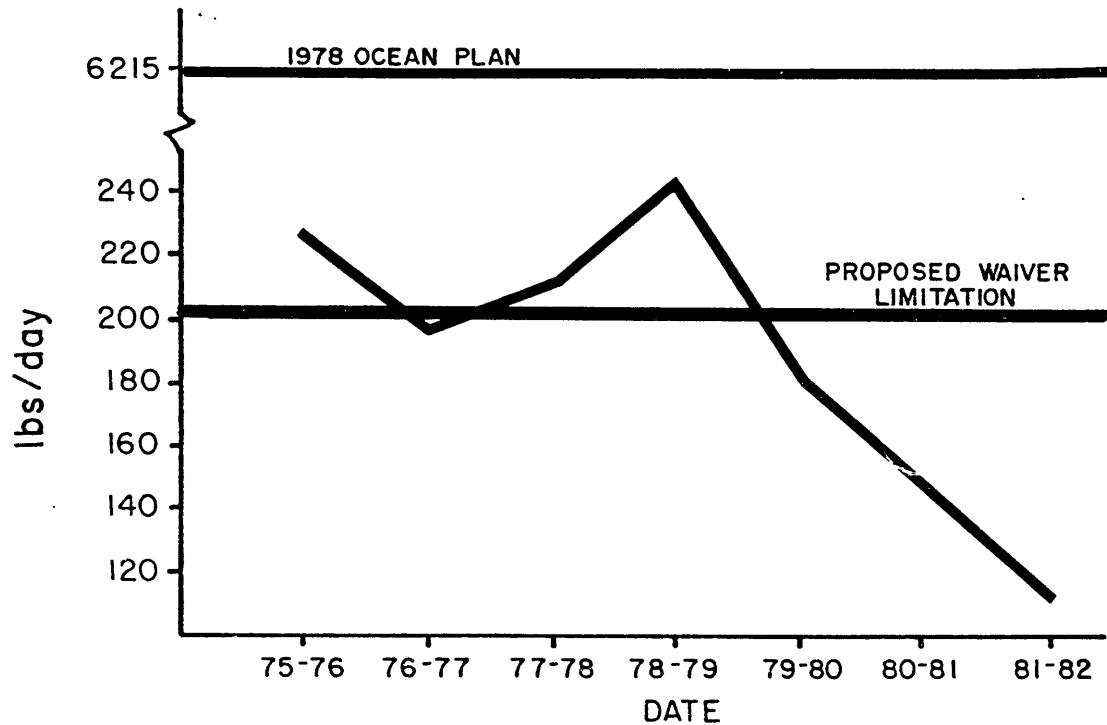


CADMIUM EFFLUENT

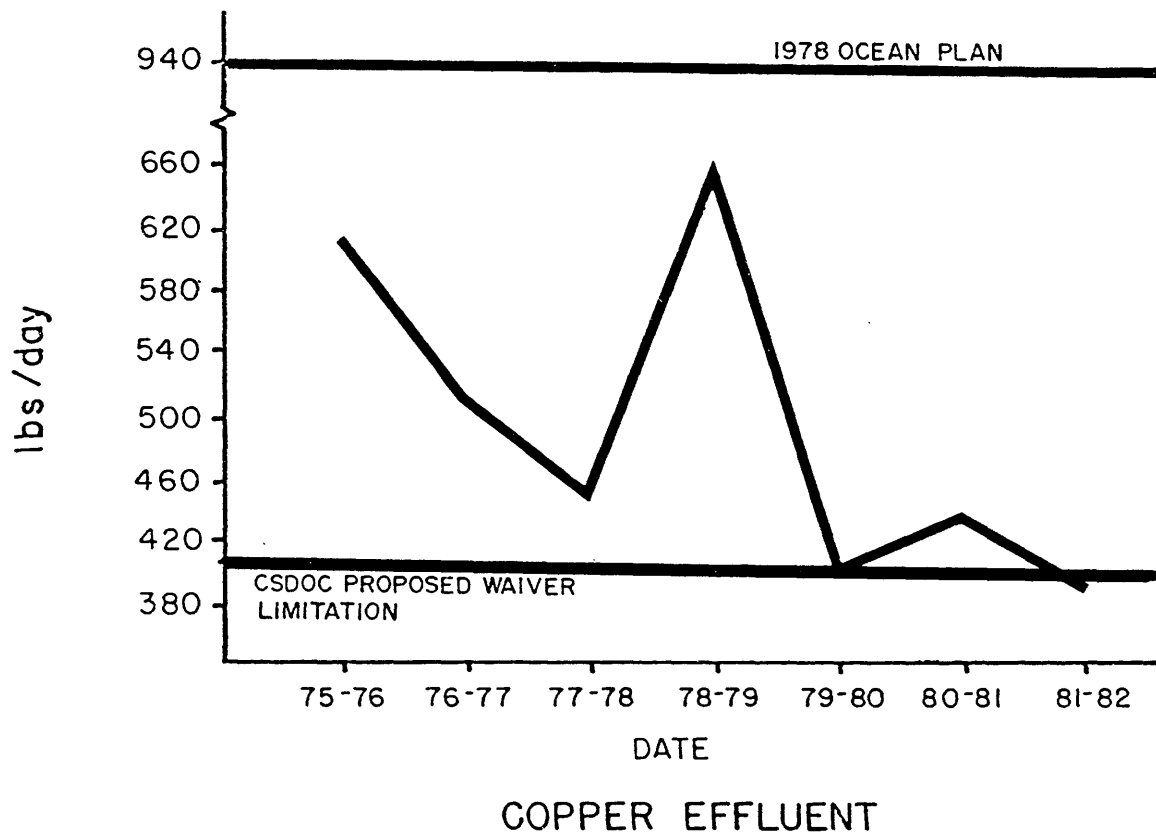


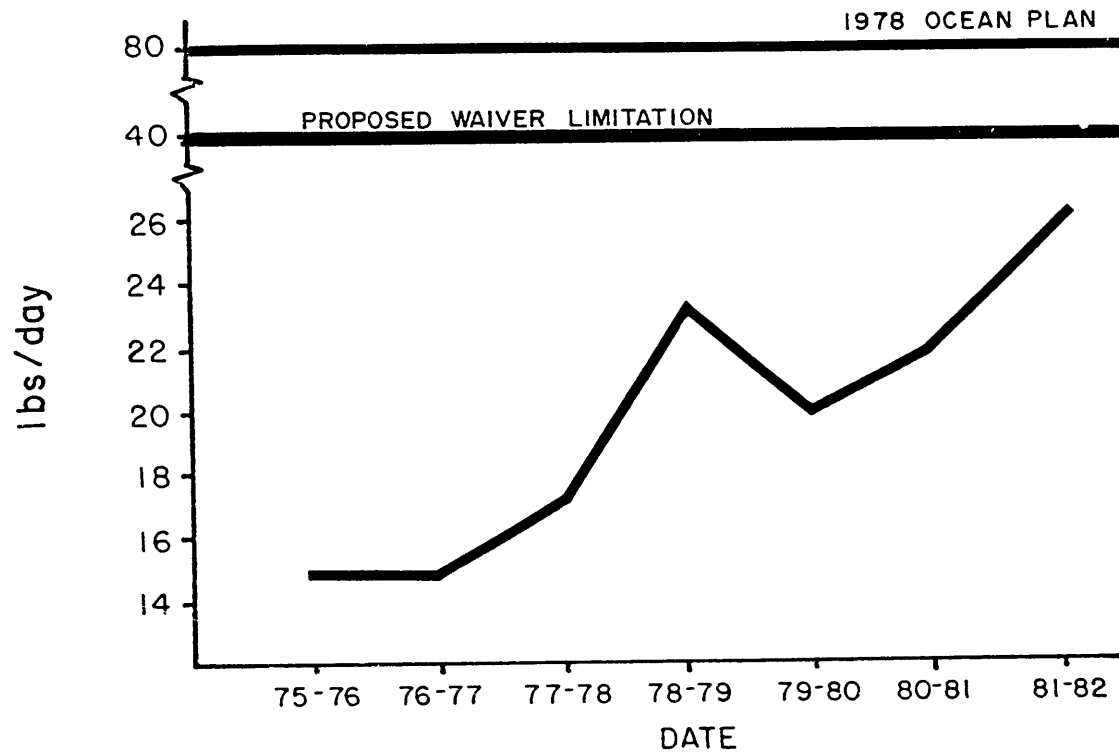


CHROMIUM EFFLUENT

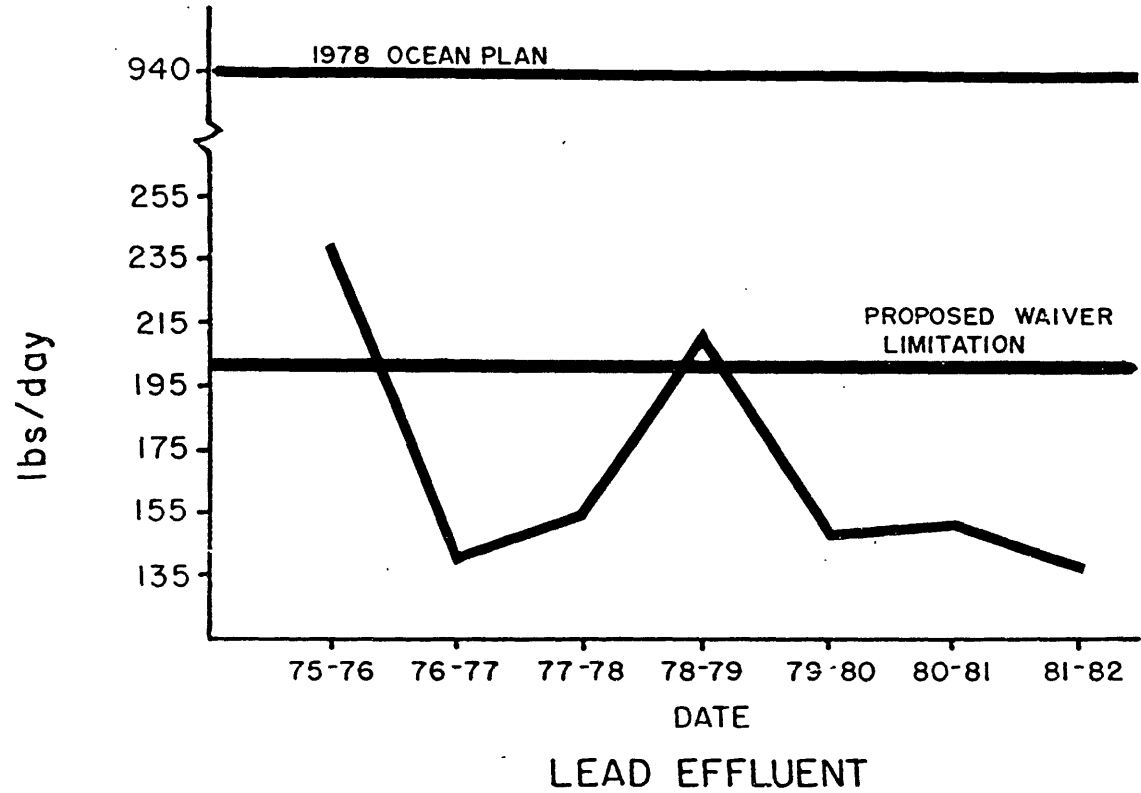


NICKEL EFFLUENT





SILVER EFFLUENT



DISCHARGE LIMITS, mg/l

CONSTITUENT	July 1, 1976	July 1, 1978	July 1, 1983 (Tentative) ¹
Arsenic	2.0	2.0	2.0
Cadmium	5.0	3.0	1.0
Chromium (total)	6.0	2.0	0.5
Copper	10.0	4.0	2.0
Lead	2.0	2.0	2.0
Mercury	0.03	0.03	0.03
Nickel	10.0	10.0	10.0
Silver	5.0	5.0	5.0
Zinc	15.0	10.0	10.0
Cyanide (total)	10.0	5.0	5.0
Cyanide (free) ²	1.0	1.0	1.0

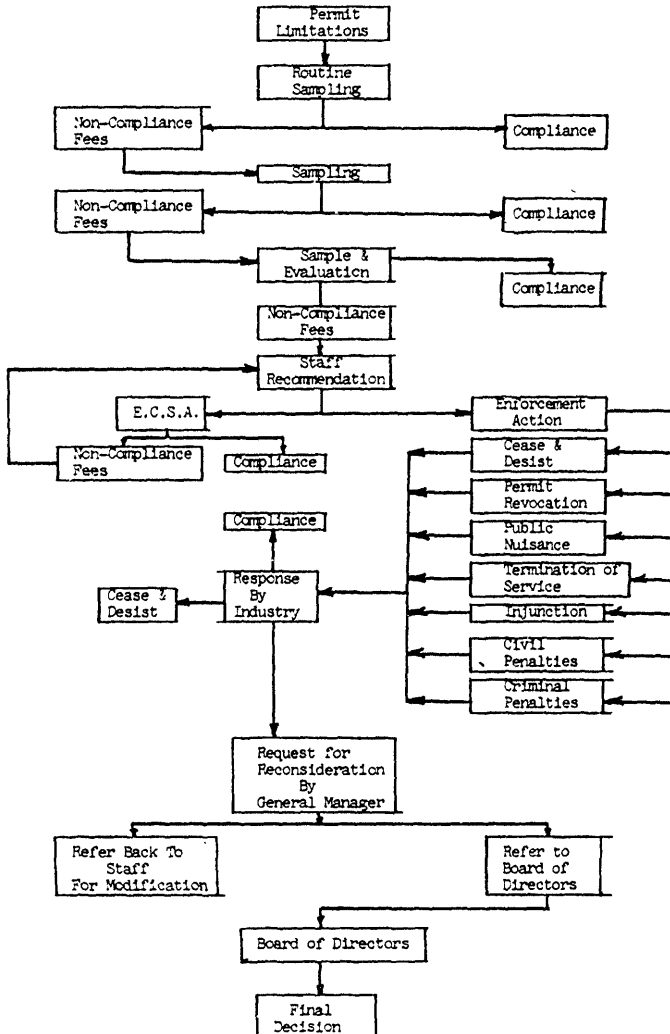
¹July 1, 1983 discharge limits are tentative; these limits will be evaluated in the future to determine the removal effects of future improvements to the treatment facilities of the District.

²The term "free cyanide" shall mean those cyanides amenable to chlorination as described in the *Annual Book of ASTM Standards*, 1972, Standard D 2036-72 Method B, page 553.

FEES FOR NON-COMPLIANCE WITH PERMIT CONDITIONS
AND MASS EMISSION RATES

	Dollars per Pound per Day In Excess of Limit
Arsenic	\$100.00
Cadmium	100.00
Chromium (Total)	100.00
Copper	30.00
Lead	40.00
Mercury	100.00
Nickel	40.00
Silver	100.00
Zinc	20.00
Cyanide (Total)	40.00
Cyanide (Free, amenable to chlorination)	100.00
Total Identifiable Chlorinated Hydrocarbons	100.00
Phenols	50.00
Dissolved Sulfides	50.00

COUNTY SANITATION DISTRICTS OF ORANGE COUNTY
INDUSTRIAL WASTE DIVISION
ENFORCEMENT FLOW DIAGRAM



Mr. D'AMOURS. Thank you very much for your testimony, Mr. Harper.

Mr. Harper, Ken Kamlet is going to testify a little later that believes resources such as the ocean are underpriced and therefore tend to be overutilized and wasted as a resource. He is also going to argue, I suspect, that ocean dumpers should pay according to the benefits they receive and according to the costs they impose upon our society.

EPA, in its testimony, suggested that we should give them authorization to collect user fees.

I did not raise this question with Mr. Eidsness or anybody from EPA, but I just wonder what your reaction to Mr. Kamlet's and Mr. Eidsness' testimony would be in this regard.

Mr. HARPER. First, I would say that if the user fee is to be in the form of a penalty, if you will, I think our organization would oppose it.

But if the user fee was to generate funds for the purpose of the research associated with the disposal of municipal sludges in the ocean, I believe we would support that.

Mr. D'AMOURS. Very good, I appreciate your answer.

Last year, during reauthorization hearings we heard evidence that many municipalities were waiting impatiently for ocean dumping permits, yet the EPA has indicated that few such applications have been received.

Does this indicate that, in fact, the testimony we heard last year was not accurate and there is not all that great of a desire to rush to the oceans by many municipalities, or does it indicate perhaps that people are waiting to see how EPA will proceed in implementing court decisions?

Mr. HARPER. My experience in California is that people are now waiting to see what will happen. They are searching for reasonable, consistent methods of disposal.

In my own agency's case, we have been looking at composting. We have been looking at cocombustion with solid waste to generate energy. We have looked at just about anything that comes down the pike.

In addition to that, we are looking at a research project with NOAA on deep ocean disposal of sludge.

Mr. D'AMOURS. So there is not this need that was identified for us a year ago? There are still alternatives perceived by the municipalities which they think are viable at this point other than ocean dumping?

Mr. HARPER. Well, they are looking at them, but I would suggest that many of the coastal communities, if they had the opportunity to look at the ocean, they would do so both from a scientific and an engineering aspect.

Mr. D'AMOURS. Mr. White, do you want to comment on that?

Mr. WHITE. Yes, I would, Mr. Chairman, like to just supplement what Mr. Harper said, because all of the metropolitan sewage agencies across the United States, whether on the coast or on the Mississippi River, are generating an enormous amount of sludge.

I think the testimony you are referring to was the increasing difficulty of the nonocean options.

Mr. Harper's agency, the Orange County Sanitation District, proposed to have a composting facility and they picked the most sparsely settled area of the entire county and had a hearing at which 700 people showed up. The next morning, the Board of Supervisors said, "We are not going to do that." One option had been cutoff simply because of the lack of public acceptance.

There are no easy solutions. Right here in the Washington area, the WSSC had an arrangement to take sludge to Ohio, a terrific idea until the people in Ohio heard about it and the plan fell through.

So in a sense, we are worrying about handling success, because the program is working so successfully. In taking the materials out of our water, we have then the burden of knowing where to put them.

Really what Mr. Harper's testimony says is that the ocean is not the only option. It is an option that ought not to be automatically discarded. There will be some situations where it would be in appropriate to use the ocean, we believe, but we also think that in some circumstances it may prove to be either the best option or the one that, taken together with some of the other alternatives, can handle a very practical problem.

As Mr. Harper suggested, the sewer agencies are very willing as public local governmental agencies to commit the funds of their citizens to research and development in order to be able to handle the task. They are accountable, just as you people are, to an electorate and they have to live in their own communities. And so their response has been, "We will do whatever is necessary to find out what is going on."

The data base is woefully inadequate. We met with Congressman Forsythe's staff last year to talk about the need for adequate monitoring and expressed the willingness to pay for it, and Mr. Harper just put on the record his belief that sewer agencies across all coastal areas will be willing to put some considerable money into finding out what is going on.

I'm sorry for getting carried away.

Mr. D'AMOURS. The testimony I was referring to was last year's NOAA's testimony, when they indicated it was largely an east coast problem and estimated it was going to proliferate.

Dr. SEGAR. We are familiar with the NOAA testimony and projections to the year 2000. It is based on an EPA report which generates forward-looking numbers for the amount that might be from the year 2000.

Those numbers are inflated. The assumption in the NOAA report that was made was that every county that was in fact located on the coast or within 50 miles of the coast was a potential ocean disposer. We believe that not to be true.

At this time, to our knowledge, there is only one municipality not currently dumping who is actively looking at the development of a special permit application, and that is the South Essex Sewerage District in Massachusetts.

There are undeniably some coastal communities, particularly some of those who are currently landfilling their sludge, who might look at ocean disposal as a further option once the landfill options are exhausted.

However, we do not believe that even the majority of those coastal counties identified by NOAA would eventually choose the ocean option as their preferred way to go.

Mr. D'AMOURS. Well, that so far appears to be the case.

Just to finish up—let me ask a question concerning user-fee systems. Last year you opposed it, but what EPA is seeking this time is not a scheme of user fees, but authority to charge on a cost-reimbursable-basis. Would that be your position again this time?

Mr. HARPER. I think our concern last year was the fact that the money would go to EPA and we would have no say over what the money was used for.

Our concern is that we think that a user fee as such should guarantee the monitoring and the research that should be associated with ocean dumping.

Mr. D'AMOURS. So you would support such a scheme giving EPA such authority if the money was associated with monitoring, designation and other site-related activities?

Mr. WHITE. Well, if I may, Mr. Chairman, although we have not yet seen the proposal on the basis of Mr. Eidsness' testimony, it sounds like it is keyed to actual costs of maintaining a program.

Last year we were responding to a suggestion that was based on a per dollar, per ton, figure which we believe was sort of pulled out of the air. That is what really troubled us more than the concept, so that Mr. Hayer was really responding, I believe—if I heard it correctly—to a different approach, and that makes more sense.

Mr. D'AMOURS. I am having difficulty remembering what that dollar per ton figure was and where it came from, but I have already presumed upon the patience of my fellow committee members.

I recognize Mr. Forsythe for questions at this time.

Mr. FORSYTHE. Thank you, Mr. Chairman.

Just to follow a bit more on that specific question and to hopefully get it a little bit clearer in my mind. You want to see the users which you represent have a part in determining the research matters that are involved and not have it solely in the hands of EPA; is that correct?

Mr. HARPER. That is correct.

Mr. FORSYTHE. Which goes a bit beyond what I think EPA was saying here today.

Mr. HARPER. That is correct.

Mr. FORSYTHE. Could you please explain the work that CCA has been doing in developing the regional monitoring program?

Mr. HARPER. Yes. I am going to defer to Dr. Segar to explain that.

Dr. SEGAR. The last version of the 5-year marine pollution plan that NOAA developed in response to Public Law 952-73, the National Ocean Pollution Planning Act, included a number of recommendations for implementation of an enhanced monitoring program within the National Oceanic and Atmospheric Administration.

Many of those recommendations came from monitoring entities who were monitoring in response to permit requirements. NOAA determined that most of the monitoring that takes place around the United States, most of the marine monitoring is, in fact, permit

compliance monitoring. A good portion of that is monitoring by parties of their pipeline discharges and in addition to the monitoring of dumping that takes place.

Some of the critical needs that were identified were in the area of coordination of efforts. Standardization of methodologies, the coordination of data sets, so that overall conclusions about a particular coastal region could be obtained. It is quickly, I think, identified by NOAA that there was little rational reason to duplicate what the municipalites were in fact already doing.

So their major thrust at this point in time is to develop a regional monitoring capability which is very heavily dependent upon existing monitoring programs. What they will try to do is to put together an overall management scheme within given regions to insure that the data that has been generated is compatible and is brought together in some overall assessment.

What we are doing at CCA is to help NOAA to begin this coordination role by working with our members to bring them into the now embryonic management function that NOAA is developing.

Mr. FORSYTHE. Thank you.

Based on your experience, do you believe some sort of regional commission or authority would be useful in resolving the pollution problems of the New York and New Jersey metropolitan area? I guess I am saying super-authority.

Dr. SEGAR. Well, clearly the ongoing administrative process is a complex one. I think that at this point in time my feeling is that that process is one that could be slowed down by the development of the concept of a super-agency or a super-entity which would control them in the New York Bight.

Nevertheless, the current permittees in the New York Bight have discussed in some detail, discussed in very informal terms with EPA and with NOAA the concept that once these administrative procedures are resolved, that a coordinated monitoring effort would be put together in the northeast region.

Currently, the only region where such an effort is actively ongoing is in the entire California region. NOAA chose that region for many different reasons, but one of the reasons was that the northeast region perhaps needed it more. The political situation was such that it was not the most opportune time.

Mr. FORSYTHE. As I recall, there is really an existing inter-state sanitation commission or some such animal.

Dr. SEGAR. That is correct.

Mr. FORSYTHE. Is that still a vital agency?

Dr. SEGAR. That agency is still in existence. It deals primarily with what takes place in the estuaries with regard to pipeline discharges into the estuaries.

In the past several years, in fact, it has not been a very active agency. It is not a very large agency with a large capability. However, it is one possible foundation upon which a super-agency, as you describe it, could be built.

Mr. FORSYTHE. Even if it was not operating, at least we are monitoring research.

Dr. SEGAR. That is correct.

Mr. D'AMOURS. Thank you, Mr. Forsythe.

Mr. Carper, do you have any questions of this witness?

Mr. CARPER. Yes, I do. Thank you, Mr. Chairman.

Gentlemen, thank you for your appearance here today. As a new member of this committee, I don't fully understand the concept of user fees that are now or would prospectively be paid by ocean dumpers.

I would ask you simply to find out for my own edification, are user fees now assessed to municipalities that are currently dumping; for example, New York City?

Mr. HARPER. No, sir.

Mr. CARPER. None at all?

Mr. HARPER. No, sir.

Mr. CARPER. Has that been proposed in recent years to assess a fee?

Mr. HARPER. There was consideration of that last year in some legislation.

Mr. CARPER. Did I understand you to say that to the extent that that user fees would be used to finance research for determining alternative disposal methods other than ocean dumping, then your group would regard that as acceptable?

Mr. HARPER. No, it was not for an alternative, but it was to determine the effects of the ocean dumping activity of the municipalities.

That was the purpose, as we saw it, of the use of the user fee money.

Mr. CARPER. Other than that, do you or any of the gentlemen seated with you see any other rationale for assessing a user fee, aside from that sole purpose?

Mr. WHITE. Well, if I may, Congressman, traditionally a user fee is to require the special groups who benefit directly from some program that has been paid for by the taxpayers. For example, fees for the use of an inland waterway is the traditional concept of a user fee.

Here, frankly, the Federal Government does not do very much about making the ocean available. It does not spend any serious money.

To the extent that it does spend money on monitoring, then we believe that it makes sense to consider user fees. If it is only a money-raising arrangement or a cash register, I don't understand that to be a user fee. Such a fee would in reality, be a tax levied, therefore, on people who will put something into the ocean, but it is not a classical user fee. That is really where we stood last year.

It sounds like EPA is proposing something different, which keys it to the benefits to the users of the ocean by having monitoring and by including, perhaps, the cost to the Federal Government of designating sites and such other things so that it is a repayment of the out-of-pocket cost. That is much easier for local governmental agencies to accept.

Don't forget, any fees that are paid by a local governmental agency are going to go on to their customers. They are nonprofit operations. These are not people who are making money on this. They are public local governmental agencies.

So if the concept is that those agencies which use the ocean should pay the cost of that, then it makes sense, but not as a penalty or a rental, because nobody owns the ocean.

Mr. CARPER. Who is best capable of determining what the cost of that ocean utilization is?

Mr. WHITE. Well, I will take a crack at it. I would assume it would have to be the Environmental Protection Agency, after a lot of public comment, and then ultimately something woven into the statute, if it should go in that direction.

Mr. CARPER. Thank you, gentlemen. Those were my questions.

Mr. D'AMOURS. I would like to follow up.

You don't think anybody owns the ocean. Do you think the people of the United States own the oceans contiguous to their shores?

Mr. WHITE. I'm sorry, that is a philosophical question. I don't know the answer to that.

Mr. D'AMOURS. I don't know if that is philosophical.

Do or do not the people of the United States own the oceans contiguous to their shores?

We are telling people what they can do in those waters. Isn't that the price of ownership?

Mr. WHITE. I guess I am thinking of the far deep ocean and the total concept.

Mr. D'AMOURS. For instance, the 12 mile site, the 60 mile site, and the 106 mile site, are well within the 200-mile limit that the United States has claimed incidence of ownership, wouldn't you agree?

I think it would be a legal rather than a philosophical question.

Mr. WHITE. I believe you are right, Mr. Chairman. To the extent that I got off into an area that I don't know anything about, I am glad you caught me up.

Mr. D'AMOURS. But if there is a question of ownership of the ocean, then maybe you would have to reassess the view that you stated earlier about the propriety of the people who own a given piece of territory charging fees for its use, particularly where that use might endanger the society, would you not?

Mr. WHITE. Well, yes. I guess it would be in the same way as the air above the land mass of the United States.

Mr. D'AMOURS. As I said, I just wanted to pursue this because the record did not seem to be very clear.

I thank you very much.

Mr. Forsythe, do you have any further questions?

Mr. FORSYTHE. No, sir.

Mr. D'AMOURS. We thank you very much, gentlemen, for your important testimony.

We have now as a witness Mr. Kenneth Kamlet, who is Director of the Pollution and Toxic Substances Division, National Wildlife Federation.

Mr. Kamlet, we appreciate your patience and we await eagerly your testimony.

I would like to repeat the statement I made at the beginning of the hearing. If you could summarize your testimony, Mr. Kamlet, we would very much appreciate it. We will give the full testimony, which will be submitted for the record, our full attention.

Mr. FORSYTHE. Mr. Chairman, before the witness testifies, I have another commitment and I will have to leave. I am very sorry.

Mr. D'AMOURS. We regret that. We appreciate your staying as long as you could, Mr. Forsythe. I would ask unanimous consent that questions of panel members who can't remain in attendance be submissible for the record.

Also, I ask unanimous consent that people who did not make opening statements be allowed to do so and that the people who made opening statements be allowed to extend them if they so desire.

There being no objection, it is so ordered.

Mr. Kamlet, go ahead, please.

STATEMENT OF KENNETH S. KAMLET, DIRECTOR, POLLUTION AND TOXIC SUBSTANCES DIVISION, NATIONAL WILDLIFE FEDERATION

Mr. KAMLET. Thank you, Mr. Chairman.

With the Chair's permission, I would like to have Mr. Tom Bick of my staff, who directs our ocean dumping project, join me.

Mr. D'AMOURS. We are happy to have him.

Mr. KAMLET. Thank you. I will try to hit the highlights of my extensive prepared statement.

I would indicate that the National Wildlife Federation supports the reauthorization bill, H.R. 1761. This bill, which was passed last session as H.R. 6113 by the full House represents a compromise that was hammered out over several months of negotiation.

We believe the bill appropriately addresses the major concerns of the port and dredging industry on the one hand and environmental and fishing interests on the other.

I should emphasize, however, that our continued support of this bill is entirely contingent upon no further weakening changes being adopted; for example, of the sort that have been advocated by the American Association of Port Authorities that we will be hearing from shortly.

In addition, we would encourage the committee to make two fine-tuning changes in the bill which in no way alter the bill's substance or intent.

One desirable change described on page 7 of my prepared statement would make clear that the mandamus authority in section 7 to compel completion of the site designation process cannot be used at the behest of a would-be dumper to mandate the designation of a brandnew site which had never received even interim approval by EPA and which EPA would otherwise quite properly have no desire or intention to earmark for ocean dumping.

This problem, to which Mr. Eidsness made reference earlier could be solved by specifying that the new mandamus authority could only be triggered by some action by EPA or the corps to indicate their intention to authorize dumping at an unstudied dump site.

I don't think it is the case, as Mr. Eidsness was suggesting, that we need to scrap the mandamus authority entirely to resolve that problem.

The other useful change in the bill would delete or modify the last sentence of section 7(1) of the bill. This provision singles out the new mandamus provision above all other judicial remedies in

the citizens' suit provision as not giving rise to the possibility of an attorney's fee recovery by a successful plaintiff.

It appears to us that, if the object of the mandamus provision is to encourage the expeditious completion of dump site studies and designations, we should not be deterring public spirited but financially strapped plaintiffs from going to court to seek the new mandamus remedy.

The remainder of my comments relate to matters not addressed in H.R. 1761, but which deserve and require your urgent attention in our view. While H.R. 1761 deals primarily with the designation and management of ocean dump sites which are overwhelmingly dredged material sites, two needed amendments to the act would address problems primarily relating to nondredged waste.

Our first proposal in this regard which is described on pages 13 and 14 of my prepared statement would seek to restrain at last the potentially mass rush of new would-be waste depositors to the ocean in the wake of the *New York City* court decision and the widespread perception that the present administration is much more receptive to the ocean-dumping option than its predecessors.

For example, absent congressional intervention, some estimates project a threefold increase or more in sewage sludge dumping levels alone over the next several years. We would recommend a requirement that proposed new sources of ocean dumped materials, where such materials contain persistent toxic contaminants, be obliged to demonstrate, in addition to existing regulatory constraints, that there are no prudent and feasible alternatives to placing their waste in the ocean.

While this would not shut the door on new sources, it would at least help insure that mere economic expediency was not the driving force behind a move to the oceans by new waste sources.

I might note in this regard in light of comments by Mr. Segar of the last panel that to the extent that there is not this mass rush to the ocean that some have projected, that that would suggest that the impacts of further controls on new source inputs to the ocean would be rather modest, which in my mind would provide further justification for adopting that type of approach as a safety measure, as a precaution to prevent that sort of rush from developing.

Our second proposal is designed to insure that the decision in the *New York City* court case does not frustrate the intent of this committee and the Congress in adopting the 1977 amendments to the ocean-dumping law.

It would make clear the commitment that was reaffirmed in a July 14, 1981 letter to the EPA Administrator from five key members of this committee that "The Merchant Marine and Fisheries Committee remains absolutely committed to the goals of the MPRSA, the cessation of harmful ocean dumping, which threatens the marine environment."

This letter, which was signed by Messrs. Breaux, Forsythe, Pritchard, Snyder, and Lent, while it emphasized that "The 1977 amendments * * * do not constitute a blanket prohibition against ocean dumping of all sewage sludge after December 31, 1981," acknowledged the intent to prohibit the continuing dumping of "sewage sludge which may be harmful to human environment or to the human health, welfare, and amenities."

Another letter at about the same time from five or six other committee members emphasized this point even more strongly.

Unfortunately, Judge Sofaer in the *New York City* case misconstrued the intent of the 1977 amendment and substituted his own judgment for that of the Congress, opening the door to continued ocean dumping of highly harmful sewage sludges by effectively exalting economic considerations to a determinative status.

We urge the committee to amend the 1977 amendment to make clear that the sludges to which the amendment applies are harmful sludges as determined by the application of the environmental impact criteria in EPA's regulations.

Finally, we would encourage the committee to consider an additional amendment designed to assure the integrity of the ocean dumping impact evaluation process.

Specifically, we urge the adoption of an amendment which would establish tough criminal penalties to deter the knowing or willful falsification or distortion of ocean dumping sampling or testing data or results, and which would require EPA and the corps to institute an effective quality control program to assure the reliability of test results submitted to it.

Exhibit 3, which is appended to my prepared statement, documents a recent instance of alleged knowing data falsification in connection with the Tampa dredged material disposal site, and illustrates the need for an amendment of the sort proposed.

These affidavits demonstrate that when results of testing the sediments from one of three sampling locations conclusively showed that they were very toxic and therefore failed the bioassay test the testing laboratory distorted those results and moved to a new sampling location that would yield "acceptable sediments."

My prepared statement and accompanying exhibit I also describes some of our serious concerns regarding EPA's plans to severely weaken its nationwide ocean dumping regulations.

The draft changes would include relaxed restrictions on the dumping of known cancer-causing agents, a waiver of the need to test ocean-dumped sludge for toxicity or food chain contamination potential, and reinstatement of the discredited "interim permit" approach, albeit possibly under another name, which allows environmentally unacceptable materials to be ocean dumped as long as best efforts have been made to alleviate the problem.

I'll conclude my remarks at this point and be happy to entertain questions.

[The statement of Mr. Kamlet follows:]

PREPARED STATEMENT OF KENNETH S. KAMLET, ON BEHALF OF THE NATIONAL WILDLIFE FEDERATION

Messrs. Chairmen and members of the subcommittees, I am Kenneth S. Kamlet, Director of the National Wildlife Federation's Pollution and Toxic Substances Division. I appreciate the invitation to appear once again before these subcommittees on behalf of the National Wildlife Federation and its more than 4.2 million members and supporters (and our 53 state and territorial affiliates).

I would like to take this opportunity to address a handful of important and pertinent issues relevant to the status of ocean dumping regulation in the United States and legislative refinements which may be needed in the current program.

My testimony is divided into the following five parts: (1) comments on H.R. 1761, the reintroduced version of HR 6113—the Ocean Dumping Amendments Act of 1982, which was passed last Session by the full House of Representatives, but was not

acted on by the Senate; (2) comments on a recent draft of proposed EPA revisions to the Ocean Dumping Regulations and Criteria; (3) a summary of the status of NWF's lawsuit against 6 major New Jersey sludge-dumping municipalities; (4) comments on needed amendments to the MPRSA beyond those addressed in H.R. 1761; and (5) brief comments on the "user fee" issue.

1. COMMENTS ON H.R. 1761

H.R. 6113, passed by the full House last year, was evaluated and approved by the Merchant Marine and Fisheries Committee and the Public Works and Transportation Committee, after a lengthy hearing and negotiation process. I think it is fair to say that, while neither the port and dredging interests nor the environmental community were entirely satisfied with the final bill, the bill reflected a substantial effort to address the major concerns of all affected interests. We recommended passage of H.R. 6113 in the last Congress and are prepared to support H.R. 1761 now. However, our support for such legislation is entirely contingent on the lack of any further weakening changes. We understand that the American Association of Port Authorities ("AAPA") has developed a set of recommended amendments which it is considering asking this Committee and the Congress to pursue. If AAPA goes forward with this effort, I must in candor state that the National Wildlife Federation and the environmental and fisheries communities will feel obliged to press for strengthening changes in the bill.

With this in mind, we offer the following comments on the major provisions of H.R. 1761.

a. *Mandatory site designation (§ 2(a)).*—The bill would make mandatory (by converting "may" to "shall" in § 102(c)) the designation of approved ocean dumping sites by the Administrator, and implicitly precludes dumping at sites which have not been so designated. The concern has been expressed with regard to this provision that it would somehow narrow the ability of the Corps of Engineers to independently select ocean dumpsites for dredged material where it is not feasible to use an EPA-designated site. This concern is not well-founded for several reasons.

First, the provision merely embodies the principle of looking before you leap. It reaffirms what is no more than a matter of simple logic and prudence: that the suitability of an ocean dumpsite to safely receive the materials proposed to be dumped there should be assessed before the dumping is allowed.

Second, the provision would in no significant way alter the prior study and designation requirement of existing law. This requirement derives from § 102(c) of the MPRSA, which authorizes the designation of dumpsites only after considering ocean dumping criteria established pursuant to the Act, and from the incorporated provisions of Article IV(2) of the London Dumping Convention, which require prior study of dumpsite characteristics as a prerequisite to permit issuance. Despite the decision in the D.C. Circuit, in *NWF v. Costle I*, upholding EPA's establishment of a 3-year transition period in 1977 for phasing-in site designations while dumping continued on an interim-approved basis, nothing in that decision supports the notion that prior study requirements can be ignored indefinitely while ocean dumping continues at unstudied and undesignated sites. (A recent federal district court decision, involving the Tampa dredged material disposal site, supports this view that "the *Costle* decision does not require a finding that the EPA's interim designation of [the Tampa site—or, presumably, any other site] was proper or lawful." *Manatee County v. Gorsuch*, No. 82-248-Civ-T-GC (M.D. Fla. Dec. 22, 1982).)

Third, the bill in no way alters the Corps' authority under § 103(d) of the existing law to select sites on its own where use of EPA-designated sites is infeasible. Indeed, the version of the bill approved by the House emphasizes this fact by specifying at the end of § 2(a)(2) of the bill that "Nothing contained in this paragraph shall be construed to limit the authority of the Secretary under section 103."

Fourth, the amendment really does little, if anything, to alter what is really already a mandatory site designation requirement. Although the language of § 102(c) of the existing statute is worded in the form of the discretionary word "may," in terms of the Administrator's authority to designate recommended sites for dumping, this is coupled with a mandatory duty in § 104(a) of the Act (which deals with permit conditions) to specify in each ocean dumping permit recommended or approved sites at which the dumping may occur. Thus, while the Administrator has the discretionary authority to designate a site, that in no way implies that a dumper is free to dump at an undesignated site absent a decision by the Administrator to specify an approved site.

Finally, the bill expressly exempts all existing interim-approved ocean dumpsites (i.e., those approved before July 1, 1982) from the need to comply with the new site

designation criteria prescribed in the bill, again greatly limiting the impact of the bill on existing and foreseeable dumping activities. (See, § 5(a), "Transitional Provisions").

b. *New mandamus authority (§ 7)*.—In return for the added protections afforded to dumpers at existing interim-approved ocean dumpsites, the bill establishes a new mandamus authority, which gives the federal district courts jurisdiction "to issue writs of mandamus commanding the Administrator to implement in a timely manner the site designation provisions of this title." This provision was developed out of the desire to ensure expeditious completion of site designation studies, without at the same time penalizing "innocent" dumpers who might be deprived of their use of an interim-approved site if a court order were obtained under existing law enjoining further use of non-finally designated dumpsites.

While we welcome the sentiment regarding expedited site designation, embodied in this mandamus provision, in actuality it does little to expand the existing right of citizens under the citizens' suit provision and under the Federal mandamus statute to take legal action to compel completion of site designation studies before dumping can be authorized at an unstudied site. Rather, the prod provided for expeditious completion of site studies in H.R. 1761 would primarily benefit would-be dumpers who, absent completion of site studies, would be extremely vulnerable to legal challenge which might jeopardize their ability to continue ocean dumping pending completion of site studies. That's okay, though.

It would be desirable, however, if this provision is to serve as an effective prod for the completion of site designation studies, to delete the last sentence of § 7(1) which precludes the recovery of attorneys fees for mandamus actions of this kind. If the possibility of private suits to spur accelerated site designation is to serve as a meaningful deterrent to delay, the public-spirited plaintiffs who bring such mandamus actions should not be forced to bear the full costs of litigation. It is not clear why attorneys fees should, in principle, be recoverable for all other citizen suits, but specifically unavailable for mandamus actions to foster site designation.

(In the alternative, now that EPA has once again delayed the scheduled completion of site designations for the sites covered by the court order in *NWF v. Costle II* (and specifically addressed in the Committee Report on H.R. 6113)—see 49 Fed. Reg. 5557 (Feb. 7, 1983)—the sentence might be amended to preclude recovery of attorneys fees only for actions commenced prior to the time limits specified for individual sites in EPA's latest Federal Register notice. Such a change, and the prospect of potential Federal liability for attorneys fees in connection with sites not designated in accordance with the latest relaxation of completion dates, might provide some added incentive on EPA to not delay still further.)

One final point should be made regarding the mandamus provision. We agree with Mr. Schatzow of EPA (in testimony presented last year before the Public Works Committee) that an undesirable, albeit unintended, consequence of the bill's mandamus authority, when coupled with the provision making EPA's site designation responsibilities mandatory, is that it may enable would-be ocean dumpers to go to court to compel EPA to initiate site designation studies at sites which EPA would otherwise quite properly have no desire or intention to earmark for ocean dumping. Consequently, the Committee might consider some fine tuning of the language which would leave it more in the hands of EPA to take some initial step to indicate its intention to proceed to authorize dumping at an unstudied site before the mandamus authority would be triggered. This would effectively eliminate the opportunity on the part of would-be dumpers to dictate site designation activities on the part of EPA.

c. *New monitoring and site suspension authority (§ 2(a)(2))*.—The bill would make some constructive changes in the areas of ocean dumpsite monitoring and suspension of site designations. In terms of monitoring, the Administrator would be obliged to "periodically monitor" the effects of dumping at and adjacent to each site for which monitoring is deemed "necessary" to accomplish the purposes of Title I of the Act. Although vaguely worded, its intent is clear: dumpsites which, based on the characteristics of the site and the materials to be dumped, have the potential to be adversely affected by dumping, must be monitored periodically. The bill would also require a triennial assessment of waste loadings (from dumping and non-dumping sources) at each dumpsite—presumably as a means of setting monitoring priorities.

In terms of site suspension, the bill would require the Administrator to modify the conditions of dumpsite use or suspend or terminate the designation of an ocean dumpsite where he determines (based on monitoring or the triennial assessment) that the site is "no longer suitable for such dumping."

These provisions are desirable in that they reflect the need to constantly refine and update ocean dumping decisions. If an error is made in initially approving a

dumping permit or designating an ocean dumpsite, these provisions will at least help to minimize the resultant damage.

d. *New permit condition authority.*—Section 3 affirms the authority of ocean dumping permit-writers to appropriately condition the grant of ocean dumping permits. While we believe the specified authority is already implicit under existing provisions, this language provides a useful affirmation and clarification of this fact.

e. *Schedule for completion of dumpsite studies.*—Section 8 of H.R. 6113 requires the EPA Administrator, within 180 days of enactment, to submit to Congress a schedule for expeditiously completing "the study and designation or denial of designation" of all interim-approved dumpsites. Although EPA has recently announced a modified schedule for the completion of site designations for a number of ocean dumpsites, it is important to note that no schedule of any kind has been established for an even larger list of additional dumpsites. The provision is therefore a useful and desirable one.

2. COMMENTS ON DRAFT REVISIONS TO EPA'S OCEAN DUMPING REGULATIONS

The National Wildlife Federation has obtained and reviewed a January 13, 1983, draft of proposed revisions to EPA's Ocean Dumping Regulations. These revisions represent the so-called "quick-fix" version of a more extensive ultimate set of revisions. This version is primarily geared to implementing the order in the *City of New York* case.

While we understand that the January 13th draft is continuing to undergo modifications, based on inputs from EPA's regional Offices and to accommodate concerns of high Agency officials, many of the changes involve amplification of preamble discussions rather than representing major departures from the basic thrust of the January 13th draft.

EXHIBIT I represents a preliminary analysis of the National Wildlife Federation's concerns regarding the draft proposal.

A major concern that we have is that EPA has chosen to adopt an excessively narrow view of its obligations under the *City of New York* court order. Specifically, EPA has construed the court decision as precluding absolutely any decision to ban ocean dumping solely on the basis of environmental impact criteria alone—no matter how potentially severe are such impacts. Although the accompanying Draft Action Memorandum describes the proposal as requiring a greater "showing by the applicant that other alternatives do not exist or pose substantially greater environmental risk, before ocean disposal is to be permitted" as the potential for adverse environmental impact of ocean disposal increases, it stops short of acknowledging that in some cases the risks of ocean dumping may be so great that the nature and availability of alternatives become irrelevant.

Judge Sofaer, in the *City of New York* case, did not take a similarly narrow view. The court's Opinion states:

"... Nothing in the Act requires that EPA engage in a comprehensive balancing of the factors in deciding every permit application. The notion that some applications may be denied solely because of the projected environmental impact of substances to be dumped might be justified in light of the Act's purposes. Even the decision to pressure municipalities to end dumping of materials that are only potentially hazardous might be appropriate.

"These principles fail, however, to authorize EPA's regulatory approach in its entirety. . . ."

While the court rejected the approach of establishing a conclusive presumption in every instance that materials that do not comply with the environmental impact criteria may not be ocean-dumped, it in no way precluded EPA from adopting such a presumption for wastes containing high hazard potential constituents.

Unfortunately, the EPA proposal would subject even proposals to ocean-dump known cancer-causing agents to a "balancing analysis" which ascribes the same weight to the costs of not dumping as to the health and environmental impacts of proceeding to ocean-dump.

And, although the EPA proposal pays lip service to the London Dumping Convention's strict prohibition against ocean dumping more than "trace" amounts of highly toxic "Annex 1" constituents, it would provide new authority to waive the need to test sewage sludge either for toxicity or its potential to contaminate sea-food—based solely on the results of a vaguely worded sludge and dumpsite characterization requirement.

The EPA proposal would also reinstate the discredited "interim permit" approach which was criticized in 1976 by the Chairmen and Ranking Minority Members of the very subcommittees as "not effecting the intent of Congress" and as allowing

the continued dumping of "substantial volumes of dangerous, toxic materials." Ironically, the interim permit approach that EPA seeks to restore was condemned by Judge Sofaer as "excessively lenient" in the very decision that EPA cites as necessitating the contemplated regulation revision.

3. *Status of NWF's current ocean dumping lawsuit.*—On December 22, 1982, the National Wildlife Federation and our New Jersey affiliate, the New Jersey State Federation of Sportsmen's Clubs, brought suit in New Jersey Federal District Court against EPA, the New Jersey State Department of Environmental Conservation, and the six sewerage authorities that constitute the major New Jersey sewage sludge ocean dumpers. In 1980, the New Jersey sewage authorities dumped about three million tons of sewage sludge in the New York Bight.

An excerpt of the complaint in this case is appended as EXHIBIT II.

The NWF suit contends that continued sewage sludge ocean dumping by the New Jersey sewerage authorities is unlawful in at least four separate respects.

First, these sludges contain toxic materials at more than the "trace contaminant" levels that the London Dumping Convention bars from ocean disposal.

Second, these sludges violate the 1977 amendment to the MPRSA that prohibited the ocean dumping of harmful ("unreasonably degrading") sewage sludge after the end of 1981. They also violate provisions of EPA's ocean dumping regulations which require would-be dumpers to establish that safe land-based alternatives are not available (i.e., that there is a need for the dumping); prohibit the ocean dumping of insufficiently described materials; and prohibit the dumping of sludges that present a substantial pathogen or carcinogen risk.

Third, the continued ocean dumping of sewage sludges from three of the authorities (Passaic Valley, Joint Meeting, and Bergen County) violates specific limitations imposed under conditions in the Authorities' federal wastewater treatment grants. These grants expressly required that the Authorities discontinue their ocean dumping.

Finally, the Authorities have unlawfully failed to require industrial pretreatment as needed to prevent interference with safe sludge disposal.

The main objective of our lawsuit is to eliminate a series of impediments imposed by New Jersey DEP and EPA, to implementation of land-based alternatives, and to establish a reasonable timetable for the cessation of harmful ocean dumping by the New Jersey Sewerage Authorities.

The draft revisions to EPA's Ocean Dumping Regulations and Criteria, discussed in the previous section, represent an effort to evade a number of the legal obligations addressed in our lawsuit.

4. ADDITIONAL NEEDED AMENDMENTS TO THE MPRSA

H.R. 1761 is essentially restricted to matters relating to the ocean dumping of dredged material and the designation and management of ocean dumping sites. However, in our view, additional mid-course corrections are in order in at least two areas.

First, in view of projections of rapidly rising rates of sewage sludge ocean dumping in the next few decades (some sources estimate increases in sludge dumping of three-fold or more), it would be eminently appropriate to establish tighter restrictions on the initiation from new sources of ocean dumping of sewage sludges which contain persistent toxic contaminants. Such tighter restrictions might take the form, for example, of a requirement that, for such sludges, in addition to other applicable constraints, it must be demonstrated that there is "no prudent and feasible alternative" to ocean dumping. In addition, even for existing sludges, it would be desirable to clarify the intent of the 1977 amendment as requiring the phase-out of "harmful" sewage sludges.

Second, in view of the fact that the present Ocean Dumping Regulations rely so heavily on the results of various toxicological and biochemical tests which are performed by the ocean dumping applicant or by a testing firm of the applicant's selection, assuring the accuracy and reliability of test results is critical to ensuring that excessively hazardous wastes are not ocean-dumped. The fact that far fewer samples of sewage sludge and dredged material proposed for ocean dumping are found to be toxic or bioaccumulative today than when such testing first started being conducted a few years ago, may suggest that fewer toxic materials are now being put forward as candidates for ocean disposal. However, an alternative explanation may simply be that ocean-dumpers are becoming more sophisticated at taking samples and/or performing tests (or at selecting testing labs that do so) in a manner calculated to yield the desired results. Moreover, without adequate supervision and quality control by the permitting authority, some enterprising applicants and/or testing labs

may find it hard to resist the temptation to engage in outright falsification of testing data and results.

These concerns represent more than mere idle speculation. EXHIBIT III consists of sworn affidavits from two former employees of a Florida testing firm. These affidavits document the willful suppression of damaging test results and the substitution of less incriminating test data in connection with the Tampa Dredged Material Disposal Site.

In this regard, it would be highly desirable to amend the Ocean Dumping Law to do two things: (1) require EPA and the Corps of Engineers to institute an effective quality control program, and (2) establish tough criminal penalties for knowingly falsifying or distorting ocean dumping sampling or testing data or results.

5. COMMENTS ON "USER FEE" ISSUE

Section 3(b) of H.R. 1761 would require that permit-issuer to prescribe and collect from non-federal ocean dumping permit applicants "an application fee in an amount commensurate with the reasonable administrative costs incurred or expected to be incurred. . . in processing the permit." Although this processing fee has sometimes been characterized as a user fee, it is nothing of the kind. A true "user fee" would relate to the fair market value of ocean disposal, rather than simply making the Federal government "whole" for its costs of processing or administering the ocean dumpsite designation and permitting program.

As we testified before several Congressional subcommittees last June (testimony of Edward R. Osann, June 23, 1982), resources such as the ocean that are underpriced (or are made available free of charge) tend to be overused and wasted rather than conserved. An ocean dumping user fee would supplement regulatory controls, deter unnecessary ocean dumping, and spur the search for and utilization of economically and environmentally sound alternatives.

In setting user fees for ocean dumping, which we strongly encourage the Congress to do, the guiding principal should be that the user be made to pay according to the benefits he receives and the costs which he imposes on society. Congress should end the practice of offering valuable waste disposal sites at nominal cost. The market value can be established by a review of the costs of competing disposal alternatives. It need not be imposed immediately, but could be phased-in over a period of years. We recognize that the composition of ocean-dumped material varies widely, and therefore suggest that consideration be given to allowing a degree of administrative flexibility in setting the level of the fee based upon the degree of degradation of the marine environment. We also recommend—particularly in view of these complexities—that Congress set an initial fee or floor for Fiscal 1984, such as \$2 per wet ton, retaining the option to make adjustments in future years.

Finally, for user fees to be effective, they should be comprehensive. They should be levied for all classes of users, including disposers of dredged material, and including Federal ocean-dumpers. Indeed, the present dredging program of the Corps of Engineers contains a greater-than-usual bias toward ocean disposal because of the requirement that local sponsors must provide all necessary lands, easements, and rights-of-way (as well as assuming responsibility for ongoing operation and maintenance) in connection with land-based disposal of dredged material. No parallel exists—and there should be one—for local sponsors of federal navigation projects who dispose of their dredged material in the ocean.

A fringe benefit of such a pay-as-you-go approach would be to greatly diminish the time required to plan, design, fund, and implement navigational dredging projects that must now undergo a protracted Congressional authorization and appropriation process. If the port and dredging industry wants to free itself from such legislative encumbrances, it should be willing to subject its activities to the operation of the marketplace.

That concludes my prepared statement.



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EXHIBITS TO TESTIMONY OF KENNETH S. KAMLET, March 15, 1983

EXHIBIT I--Analysis of Jan. 13, 1983 Draft of Proposed Revisions to EPA's Ocean Dumping Regulations

EXHIBIT II--Excerpt of Complaint in New Jersey Sewage Sludge Ocean Dumping Case, NWF v. Gorsuch, Civ. No. 82-4314-F (D.N.J., filed Dec. 22, 1982)

EXHIBIT III--Affidavits of Raymond H. Lewis and Christine Newman, documenting the falsification of ocean dumping sampling and testing data in connection with the Tampa Dredged Material Disposal Site

EXHIBIT I

Analysis of Jan. 13, 1983 Draft of
 Proposed Revisions to EPA's Ocean
Dumping Regulations (40 C.F.R. Parts 220-229)

The draft revisions would greatly diminish the environmental safeguards contained in EPA's current ocean dumping regulations in at least the following major respects:

- They would enable EPA to "waive" for municipal sewage sludge the test procedures (specified in existing §227.6(c)), which are designed to prevent the ocean dumping of toxic and bio-accumulative sludge contaminants. To obtain such a waiver, the applicant would simply have to provide information on the chemical characteristics of the sludge and on the proposed ocean dumpsite sufficient to satisfy the EPA permit writer that the sludge "will not cause significant undesirable effects." It would be left entirely to the unlimited discretion of the permit writer to determine whether the dumping would cause "significant undesirable effects." Moreover, no rationale is provided in the draft preamble for establishing a special mechanism to facilitate ocean dumping of sewage sludge, as compared with industrial wastes and dredge spoils. Such a distinction cannot be defended on environmental grounds and is arbitrary and capricious. (New §227.6(d)).

In National Wildlife Federation v. Costle, the U.S. Court of Appeals for the District of Columbia Circuit held (among other things) that, although the Administrator "may rationally conclude that the evaluation factors [of the statute] require certain criteria for one kind of waste and other criteria for another," he must "explain at least the basis for his determination that the differences between the two types of waste justify their different treatment." The Court found that, "we have no sufficient basis on this record for concluding that dredged and nondredged materials are significantly different." The decision in City of New York v. EPA, in criticizing EPA's use of "interim permits," makes clear that court's view that a distinction "based entirely on [the] public status" of municipal sludge dumpers, without regard to "the overall impact of their dumping on the marine environment," is not a sufficient basis for applying different regulatory requirements to the ocean dumping of sewage sludge than to other ocean-dumped wastes.

- They would eliminate the present prohibition against ocean dumping more than trace amounts of known or suspected "carcinogens [cancer-causing], mutagens [mutation-causing], and teratogens [birth defect-causing]," retaining only a limited discretionary provision allowing EPA and the Corps of Engineers to require unspecified "special studies" to determine the impact of ocean

dumped materials which they have "reasonable cause to believe" may contain "compounds identified as carcinogens, mutagens, or teratogens." (New §227.7(f); existing §§227.6(a)(5), 227.6(d).

- They would reinstate the discredited "interim permit" system to allow the ocean dumping of material found to violate the environmental impact criteria, as long as the Regional Administrator determines that the permittee "has exercised his best efforts to comply with all requirements of a special permit." (New §220.3(d)). Where an "interim permit" is issued, later renewal of this permit is not even contingent upon full compliance with the terms of the initial permit; "best efforts to comply" is sufficient.

In an October 26, 1976, letter to the EPA Administrator, Representatives Breaux, Mosher, Leggett, and Forsythe (Chairmen and Ranking Minority Members, respectively, of the Subcommittees on Oceanography, and on Fisheries and Wildlife Conservation and the Environment) criticized EPA's repeated use of "interim" permits: "EPA continues to allow substantial volume of dangerous, toxic materials to be dumped under 'interim permit' arrangements... We feel that such 'interim permits' should be summarily phased out without continued exceptions. The revised regulations do not effect the intent of Congress as expressed in the Marine Protection, Research, and Sanctuaries Act of 1972." Quoted at 42 Fed. Reg. 2464 (Jan. 11, 1977) (preamble to Final Revision of [Ocean Dumping] Regulations and Criteria).

In the City of New York v. EPA case, the court cited these comments by Reps. Breaux, et al., and concluded that the system of interim permits established by EPA, which "was responsive to municipalities' fiscal pleas without fully ascertaining the need for, or impact of, their dumping," and which predicated receipt of a permit primarily on "the dumper's good faith in attempting to obtain funding for an alternative sludge-disposal program," constituted "excessive leniency" in tolerating municipal sludge dumping. The court also noted that, "between 1973 and 1978, EPA gave far too much weight to [the financial implications of cessation of sludge dumping], accepting the word of municipalities that they had attempted to obtain financing in good faith and granting them interim permits without regard to the environmental effects."

- They would allow industrial wastes to be ocean-dumped pursuant to "emergency permits" under an overly lax definition of what constitutes an "emergency" [New §220.3(c)(1)], and without ensuring adequate consultation with the International Maritime Organization as required under the LDC. (New §220.3(c)(3)).

- They would allow industrial wastes to be ocean-dumped pursuant to a "research permit" where the EPA Administrator determines that "the potential benefits of such research [to whom?] will outweigh any... adverse impacts on [health and the environment]."

The Secretary of Commerce would have to be consulted before such a determination could be made, suggesting that readily quantifiable commercial benefits will be weighed against hard-to-quantify environmental impacts. [New §220.3(e)(1)(iii)].

- They would delete the ban on dumping insufficiently described materials, thereby eliminating a strong incentive under the present regulations to fully and adequately characterize material proposed for ocean dumping. [New §227.3].

- They would provide that an application for an interim permit need include--but only "if possible"--a schedule for eliminating ocean dumping or bringing the waste into compliance. [New §227.25].

- They would allow an applicant, if an "acceptable" alternative doesn't exist at the time of application, to merely propose an acceptable research program "to study the problem." There is no explicit requirement that any effort be made to develop an acceptable alternative. [New §227.25(e)].

EXHIBIT II

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

NATIONAL WILDLIFE FEDERATION
1412 16th Street, N.W.
Washington, D.C. 20036

and

NEW JERSEY STATE FEDERATION OF
SPORTSMEN'S CLUBS
Box 267
Cologne, New Jersey 07728

Plaintiffs,

v.

ANNE M. GORSUCH, in her official capacity
as Administrator of the United States
Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

and

JACQUELINE SCHAEFFER, in her official
capacity as Regional Administrator
of Region II of the United States
Environmental Protection Agency
26 Federal Plaza
New York, New York 10007

Civil Action
No. 82-4314-F

and

ROBERT E. HUGHEY, in his official capacity
as Commissioner of the New Jersey
Department of Environmental Protection
Trenton, New Jersey 08625

and

RICHARD KILLEEN, in his official capacity
as Chairman of the Commissioners of the
Bergen County Utilities Authority
P.O. Box 122
Little Ferry, New Jersey 07643

and

THE BERGEN COUNTY UTILITIES AUTHORITY
P.O. Box 122
Little Ferry, New Jersey 07643

and

THOMAS CIFELLI, in his official capacity as
Chairman of the Passaic Valley Sewerage
Commissioners
600 Wilson Avenue
Newark, New Jersey 07105

and

THE PASSAIC VALLEY SEWERAGE COMMISSIONERS
600 Wilson Avenue
Newark, New Jersey 07105

and

GEORGE GORDON, in his official capacity as
Chairman of the Commissioners of
the Linden Roselle Sewerage Authority
P.O. Box 124
Linden, New Jersey

and

THE LINDEN ROSELLE SEWERAGE AUTHORITY
P.O. Box 124
Linden, New Jersey 07036

and

ROBERT H. GRASHERE, in his official
capacity as Chairman of the Board of
the Joint Meeting of Essex and Union Counties
500 South First Street
Elizabeth, New Jersey 07202

and

THE JOINT MEETING OF ESSEX AND
UNION COUNTIES
500 South First Street
Elizabeth, New Jersey 07202

and

FREDERICK KURTZ, in his official capacity
as Chairman of the Commissioners of the
Middlesex County Utilities Authority
P.O. Box 461
Sayreville, New Jersey 08872

and

MIDDLESEX COUNTY UTILITIES AUTHORITY
P.O. Box 461
Sayreville, New Jersey 08872

and

ROSALIE BERGER, in her official capacity
as Chairman of the Commissioners of the
Rahway Valley Sewerage Authority
P.O. Box 227-E
Rahway, New Jersey 07065

and

THE RAHWAY VALLEY SEWERAGE AUTHORITY
P.O. Box 227-E
Rahway, New Jersey 07065

Defendants.

COMPLAINT FOR DECLARATORY JUDGMENT AND MANDATORY INJUNCTION

I. INTRODUCTION: STATEMENT OF THE CASE

1. Plaintiffs National Wildlife Federation and New Jersey Federation of Sportmen's Clubs (hereafter, collectively "NWF") bring this action to require the six defendant Sewerage Authorities to discontinue the illegal ocean dumping of contaminated sewage sludge in the New York Bight. Such dumping presents serious risks to human health and the coastal environment and is in clear violation of ocean dumping prohibitions in national and international law. Moreover, such dumping is wholly unnecessary, in that safe, economically affordable, non-ocean alternatives are available for the management of sludge produced by the six Authorities.

2. A primary objective of this action is a determination by this Court that ocean dumping by the Authorities is in conflict with the London Dumping Convention and for this reason must be discontinued. The Convention is an international treaty approved by the United States and 48 other countries. Congress has made its requirements binding on the United States through the Marine Protection, Research, and Sanctuaries Act (MPRSA). The Convention is perhaps the most comprehensive environmental treaty ever adopted. It was born out of an awareness that many coastal nations, particularly the more industrialized nations, are under strong political and economic pressure to view the oceans as an expedient solution to their growing waste disposal problems.

3. The Environmental Protection Agency (EPA) has found that the Authorities' sludges, and sludge dumped by the City of New York, contain toxic materials in amounts that the Convention bars from ocean disposal. Nevertheless, the current EPA Administration has refused to assert the authority of the Convention in legal challenges to the continued ocean dumping of these wastes. This refusal to take the Convention seriously could have severe global repercussions, as the United States has traditionally assumed a leadership role in promoting the

development and enforcement of international agreements for the protection of the environment.

4. The continued dumping of sewage sludge also violates a 1977 Amendment to the MPRSA that prohibited the ocean dumping of sewage sludge after the end of 1981, if EPA determined that such sludge "unreasonably degrades" the marine environment. This determination is based on the results of EPA-established bioassay tests. Although all of the Authorities' sludges have failed these bioassay tests, the ocean dumping continues. Accordingly, another key objective of this legal action is a determination by this Court that ocean dumping by the Authorities violates the 1981 ocean dumping deadline in the MPRSA and therefore must be discontinued.

5. In addition to failing EPA's bioassay-based requirements, ocean dumping by the Authorities conflicts with other provisions in EPA regulations implementing the MPRSA. A third objective of this action is a Court determination that ocean disposal of sludges by the Authorities violates provisions in EPA's ocean dumping regulations that: (a) require that EPA determine there is a need for the ocean dumping (i.e. that safe land-based alternatives are not available); (b) require that the Authorities sufficiently describe their sludges; and (c) prohibit the dumping of sludges that present a substantial pathogen or carcinogen risk.

6. A fourth objective of this action is a Court determination that three of the Defendant Sewerage Authorities, Passaic Valley Sewerage Commissioners (PVSC), Joint Meeting of Essex and Union Counties (JMEUC), and Bergen County Utilities Authority (BCUA), have violated specific limitations imposed by the EPA Administrator under the Clean Water Act. These limitations, in the form of conditions in the Authorities' federal wastewater treatment grants, mandate that the Authorities discontinue the ocean dumping of sewage sludge. These grant conditions provide an additional basis for this Court to compel the three Authorities to discontinue the ocean disposal of sludge.

7. A fifth objective is a Court determination that provisions in Section 307(b) of the Clean Water Act, 33 U.S.C. §1317(b), compel the Authorities to implement and enforce industrial pretreatment programs as needed to prevent interference with the safe management of their sludges. The Authorities are empowered to require industries to "pretreat" their sewage; that is, remove contaminants from discharges into the Authorities' treatment plants. Moreover, Section 307(b) and implementing regulations, compel the Authorities to exercise that power as needed to prevent interference with safe sludge disposal. Pretreatment by key industries that now discharge contaminants into the Authorities' treatment plants would greatly facilitate the Authorities' implementation of land-based alternatives to ocean dumping. Accordingly, NWP seeks an injunction compelling the Defendants to implement and enforce pretreatment programs as needed to prevent interference with the safe management of the Authorities' sludges.

8. Congress' decision to impose strict limitations on the ocean dumping of the type of persistent toxic materials found in the Authorities' sludges was not idly made. That decision recognized the hazards of dispersing such materials in the ocean, where their accumulation in fish and shellfish threatens the health of human consumers of seafood. It recognized, too, the potential long-term damage that such materials can inflict on the coastal environment and the extreme difficulty of monitoring such impacts and of rectifying them once discovered.

9. Congress' decision to limit sludge dumping also recognized that safe, economically feasible land-based sludge management alternatives are available to those few remaining sludge producers still dumping in the ocean. Ninety-six percent of all sludge produced in the United States is managed by land-based techniques. Four years ago the Authorities themselves concluded that non-ocean sludge management alternatives were technically and economically feasible. In fact, the Authorities, aware of the ocean dumping restrictions

in national and international law--and prodded by a previous Administration that took these restrictions seriously--have already taken the first steps toward implementing land-based sludge management programs. Millions of dollars have been spent, plans have been prepared and, in some cases, facilities have been built to enable the Authorities to end ocean dumping in compliance with the law. This effort is now at a standstill as a result of the current Administration's policy reversal on ocean dumping. That policy reversal flies in the face of national and international legal mandates that have remained unchanged over the past five years.

10. The relief sought by NWF includes a court-approved timetable for the expeditious phase-out of ocean dumping by the Authorities and the development of environmentally-safe land-based alternatives. In effect, such a timetable would merely reinstate and update implementation schedules (for meeting the 1981 ocean dumping deadline) that, until recently, were binding conditions in the Authorities' ocean dumping permits. All of the Authorities had made tangible progress toward developing non-ocean alternatives at the time of EPA's policy reversal. NWF asks this Court to assure that this forward progress is resumed pursuant to a realistic, judicially-sanctioned timetable. Such a court-approved timetable is by no means unique. Philadelphia is but one example of a former ocean dumper that phased out ocean dumping and implemented a land-based sludge management program pursuant to a judicially-approved timetable. The Philadelphia approach can serve as a model in this litigation.

11. This lawsuit culminates years of effort by the National Wildlife Federation to bring an end to the irresponsible use of the ocean as a toxic waste dumping ground. The Federation has, for the past decade, been a leader in the movement to counter the political and economic forces that encourage the use of the ocean as a convenient out-of-site, out-of-mind waste disposal solution. Judicial,

administrative and legislative efforts by the Federation and others have resulted in rational, environmentally responsible criteria for determining what can and cannot be safely dumped in the ocean. These legally-mandated criteria--incorporated in EPA's ocean dumping regulations in 1977--implement both the Ocean Dumping Act and London Dumping Convention. The Authorities have failed to show that their sludges meet these criteria. Consequently, the continued ocean dumping of contaminated sludge by the Authorities is not only environmentally damaging and unnecessary but clearly illegal. NWF, having exhausted all other avenues of redress, undertakes this action to compel EPA, DEP and the six New Jersey Sewerage Authorities to bring an end to the ocean dumping of contaminated sewage sludge and to revitalize their efforts to implement safe, land-based sludge management programs.

II. JURISDICTION AND VENUE

12. This Court has jurisdiction over the claims for relief set forth in this Complaint pursuant to 33 U.S.C. §1415(g) (Citizen Suits Provision of the Marine Protection, Research, and Sanctuaries Act); 33 U.S.C. §1365 (Citizen Suits Provision of the Clean Water Act); and 28 U.S.C. §1331 (Federal Question). Plaintiffs have provided notice of their intent to sue as required by the citizen suit provisions of the above-referenced statutes.

13. Venue is founded in this Court pursuant to 28 U.S.C. §1391; 33 U.S.C. §1415(g)(3)(A); and 33 U.S.C. §1365(c)(1).

III. DESCRIPTION OF THE PARTIES

14. Plaintiff National Wildlife Federation is a nationwide conservation organization incorporated as a nonprofit corporation in 1939 under the laws of the District of Columbia. The Federation is dedicated to the restoration, wise

V. CLAIMS

COUNT I

VIOLATION OF THE LONDON DUMPING CONVENTION

92. Paragraphs 35 through 60 are incorporated herein by reference.

93. The London Dumping Convention (hereafter "the Convention") is an international treaty that governs the ocean dumping of solid wastes such as sewage sludge, dredge spoils, industrial chemicals and radioactive substances. In 1974 the provisions and requirements of the Convention were incorporated into U.S. law and made binding on the United States by an amendment to the Marine Protection, Research, and Sanctuaries Act (MPRSA). 33 U.S.C. §1412(a) (1976).

94. Article IV of the Convention prohibits--with narrow exceptions not applicable here--the ocean dumping of wastes, including sewage sludge, which contain constituents listed in Annex I of the Convention as other than "trace contaminants." This absolute prohibition is without regard to dumping need, availability of alternatives, or economic or technical considerations. All of the Authorities' sludges contain some or all of the following prohibited "Annex I constituents": organohalogens (such as the chlorinated hydrocarbons PCB and DDT), mercury, cadmium and oily wastes.

95. The Convention leaves it to each member country to develop its own definition of "trace contaminants." EPA has defined "trace contaminants" in its ocean dumping regulations as contaminants present in materials to be dumped in such amounts that the materials will not cause "significant undesirable effects," based on specified EPA testing procedures. 40 C.F.R. §227.6.

96. EPA has determined that none of the Authorities' sludges could pass the bioassay tests specified in EPA's regulations to determine if Annex I constituents are present as other than trace contaminants. The Chief of the Marine

Protection Program of EPA Region II publicly announced this determination at an October 2, 1979 ocean-dumping permit hearing.

97. Notwithstanding this determination, EPA allowed the Authorities to continue ocean dumping under interim permits until the Regional Administrator of EPA Region II finally advised the Authorities, by letter dated March 19, 1981, that all ocean dumping must end by April 10, 1981. The Authorities challenged this ocean dumping ban in legal actions which ultimately were negotiated to a settlement with EPA in April 1982. Pursuant to this settlement, the Authorities could continue to ocean dump their sludges pending the resolution of future permit proceedings. This Court, in approving these settlement agreements in May 1982, emphasized that it was reaching no conclusions with regard to the legal merits of the agreements.

98. Neither the London Dumping Convention nor EPA regulations implementing the Convention, 40 C.F.R. §§220.3(d), 227.2, 227.3 and 227.6, allow the issuance of ocean dumping permits for materials that contain Annex I constituents as other than trace contaminants.

99. EPA acted arbitrarily and capriciously and in violation of the requirements of the LDC, as implemented by the MPRSA and EPA regulations, by: (a) granting the Authorities interim permits to ocean dump their sludges even though EPA was aware that these sludges contained Annex I constituents as other than trace contaminants; and (b) entering into settlement agreements with the Authorities that allow the Authorities to continue ocean dumping these sludges.

100. EPA's failure to enforce its obligations under the Convention sets a dangerous precedent and threatens the health and welfare of NWF's members who use and enjoy the coastal marine environment.

COUNT II

VIOLATIONS OF THE OCEAN DUMPING ACT AND IMPLEMENTING REGULATIONS

101. Paragraphs 35 through 91 are incorporated herein by reference.

102. In 1972 Congress enacted the Marine Protection, Research, and Sanctuaries Act (MPRSA), also known as the "Ocean Dumping Act," to regulate the dumping of materials in the ocean. It provides that the Administrator "may issue permits" to ocean dump materials that "will not unreasonably degrade or endanger human health, welfare or amenities, or the marine environment, ecological systems or economic potentialities." 33 U.S.C. §1412(a).

103. Congress amended the MPRSA in 1977 to absolutely prohibit the ocean dumping of sludge after December 31, 1981, which may "unreasonably degrade or endanger human health ... or the marine environment." 33 U.S.C. §1412a.

104. In 1977 EPA promulgated ocean dumping regulations that implement the MPRSA. 40 C.F.R. Part 227. These regulations establish environmental impact criteria for determining whether or not EPA may issue a permit for a material proposed for ocean dumping. Sludges that fail to meet certain of these criteria are presumed to be "unreasonably degrading" as a matter of law, and therefore subject to the December 31, 1981 deadline.

A. Failure to Meet the Limiting Permissible Concentration (LPC) Criterion Required by 40 C.F.R. §§227.8 and 227.27

105. A key criterion used by EPA to determine if a material is "unreasonably degrading" to the marine environment is whether dumping of the material would exceed EPA's limiting permissible concentration (LPC). 40 C.F.R. §§227.8 and 227.27. The LPC criterion is based on the results of bioassay toxicity tests (i.e. laboratory tests using appropriate marine organisms) performed on the liquid, suspended particulate and solid phases of the material.

106. Based on the results of bioassay toxicity data submitted by the Authorities, the chief of the Marine Protection Program of EPA Region II announced at an October 2, 1979 ocean dumping permit hearing that "All the sludges proposed [for ocean dumping by the New Jersey Authorities] are discharged at rates which exceed the limiting permissible concentration criteria, found in the regulations." This determination was never challenged by the Authorities, and was implicitly adopted by the EPA hearing examiner and subsequently by the EPA Regional Administrator in ruling on the Authorities' permit applications.

107. Failure of a sludge to meet EPA's LPC criterion triggers the December 31, 1981 statutory ocean dumping deadline. Because the Authorities' sludges exceeded the LPC criterion, and because the Authorities had not developed implementation schedules showing they could meet the 1981 statutory deadline, the EPA Regional Administrator decided in November 1980 to deny five of the Authorities' permits. (He had denied BCUA's permit the previous year.) Though fully aware that the Authorities' sludges failed to meet the LPC criterion, the EPA Administrator (by counsel) reversed the Regional Administrator's dumping prohibition by entering into settlement agreements with the Authorities in April 1982 that allow all of the Authorities to continue ocean dumping beyond the 1981 deadline.

108. Even assuming, arguendo, that all other regulatory requirements for the issuance of interim permits were met by the Authorities, the EPA Administrator acted arbitrarily and capriciously, and in violation of the 1977 Amendment to the MPRSA, by allowing the Authorities to continue to ocean dump sludges beyond the 1981 statutory deadline even though the sludges failed the LPC test.

B. Failure To Make the "Need" Determination Required by 40 C.F.R. §227.3

109. Regardless of whether or not a sludge proposed for ocean dumping satisfies EPA's LPC test or other environmental impact criteria, EPA regulations specify that a sludge may be ocean dumped only where EPA first determines that there is a need for such dumping. 40 C.F.R. §§227.2(a)(1) and (b)(2) and 227.3(b). EPA regulations at 40 C.F.R. §§227.14-227.16 set out factors that must be considered by EPA in making this "need" determination.

110. As noted in paragraphs 70 through 91 above, safe land-based alternatives to ocean dumping are available to the Authorities, particularly if they implement and enforce industrial pretreatment programs. The EPA Administrator has made no determination, as required by 40 C.F.R. §§227.2, 227.3 and 227.14-227.16, that the Authorities cannot develop safe land-based alternatives (i.e. that there is a need for ocean disposal).

111. The EPA Administrator has acted arbitrarily and capriciously and in violation of the MPRSA and implementing regulations by renewing the Authorities' interim ocean dumping permits in 1978 and 1979, and by agreeing to indefinitely extend those permits in April 1982, without first demonstrating the need for ocean dumping pursuant to the factors set out in 40 C.F.R. §§227.14-227.16.

C. Failure To Meet Other MPRSA Requirements

112. Regardless of the results of the LPC test and the evaluation of the need for ocean dumping, other requirements must be met before sludges may be lawfully dumped in the ocean. One such requirement noted previously (Count I) is that sludges must not contain constituents listed in Annex I of the London Dumping Convention as other than trace contaminants. In addition, EPA's ocean-dumping regulations provide that sludges must be sufficiently described by the permit applicant, 40 C.F.R. §227.5(c), and must not present a pathogen risk pursuant

to 40 C.F.R. §227.7(c) or a carcinogen risk pursuant to 40 C.F.R. §227.6(a)(5). Ocean dumping by the Authorities violates these criteria in the following respects:

1. The Failure to Sufficiently Describe Materials Proposed for Dumping

113. Pursuant to 40 C.F.R. §227.5(c), the ocean dumping of materials "insufficiently described by the applicant in terms of their compositions and properties to permit the application of the environmental impact criteria" is absolutely prohibited. Similarly, pursuant to 40 C.F.R. §221.1(c), the Authorities must provide an adequate "physical and chemical description of material to be dumped, including results of tests necessary to apply the [Environmental Impact] Criteria."

114. Sludge quality reports submitted to EPA by the Authorities in 1981 and thereafter do not indicate whether the sludges contain organohalogens, much less at what concentrations. This information is necessary for EPA to determine whether or not the sludges contain organohalogens (such as PCBs and pesticides) which, pursuant to the London Dumping Convention and the regulatory criteria implementing the Convention, cannot be dumped as other than "trace contaminants" (see Count I above). EPA's environmental impact criteria also prohibit the dumping of oxygen-consuming wastes which depress the ocean's dissolved oxygen content more than 25 per cent "below the normally anticipated ambient conditions in the disposal area at the time of dumping." 40 C.F.R. §227.7. Sewage sludge dumping adds huge quantities of oxygen-consuming organic material to the Bight. The Authorities have not demonstrated whether the oxygen demands of their sludges will result in a violation of this §227.7 criterion. Finally, the Authorities' reports do not indicate whether the "Annex I constituents" (mercury, cadmium, organohalogens and oily wastes) in the Authorities' sludges are bioaccumulated by test organisms, even though EPA's environmental impact criteria

require such determinations. 40 C.F.R. §227.6(b) and (c). Accordingly, the Authorities have "insufficiently described" their sludges with respect to organohalogen content, biochemical oxygen-demand, and the bioaccumulation potential of "Annex I" constituents.

2. Violation of the Pathogen Risk Criterion

115. Pursuant to 40 C.F.R. §227.7(c), there is an absolute prohibition against the ocean dumping of wastes:

Containing living organisms ... if the organisms present would endanger human health or that of domestic animals, fish, shellfish and wildlife by:

- (1) Extending the range of biological pests, viruses, pathogenic microorganisms or other agents capable of infesting, infecting or extensively and permanently altering the normal populations of organisms;
- (2) Degrading uninfected areas; or
- (3) Introducing viable species not indigenous to an area.

116. There is evidence that human pathogens in sludges dumped in the Bight have migrated far from the sludge dumpsite. These pathogens could well be endangering marine life and human consumers of contaminated seafood. Moreover, as noted above (paragraphs 58-59), the sludge dumpsite could be a breeding ground for drug-resistant strains of bacteria. This evidence strongly suggests that the Authorities' sludges cannot meet the §227.7(c) "pathogen" criterion, and the Authorities have not met their burden of showing otherwise.

3. Violation of the Carcinogen Risk Criterion

117. Pursuant to 40 C.F.R. §227.6(a)(5), there is an absolute prohibition against the ocean dumping of other than trace contaminant amounts of known "carcinogens, mutagens, or teratogens or materials suspected to be carcinogens, mutagens, or teratogens, by responsible scientific opinion."

118. Sludges dumped by the Authorities contain a number of materials known or suspected to be human carcinogens by responsible scientific opinion. These include PCBs, PAHs, cadmium, and other pollutants (see General Allegations above).

The Authorities have not met their burden of demonstrating that their sludges contain only trace contaminant amounts of these suspected carcinogens.

119. EPA has acted arbitrarily and capriciously and in violation of the MPRSA and implementing regulations by renewing the Authorities' interim ocean dumping permits in 1978 and 1979, and by agreeing to indefinitely extend those permits in April 1982, without a showing that the Authorities' sludges: (a) have been sufficiently described pursuant to 40 C.F.R. §227.5, (b) meet the pathogen criterion set out in 40 C.F.R. §227.7, and (c) meet the carcinogen criterion set out in 40 C.F.R. §227.6(a)(5).

120. The violations of the MPRSA and implementing regulations set out in this Count II threaten the health of the Plaintiffs and their use and enjoyment of the coastal marine environment.

COUNT III

VIOLATIONS OF THE PRETREATMENT REQUIREMENTS OF THE CLEAN WATER ACT

121. The pretreatment provision in the Clean Water Act, 33 U.S.C. §1317(b), and EPA regulations implementing that provision, 40 C.F.R. Part 403, require industrial pretreatment as needed to prevent interference with the safe use or disposal of the Authorities' sludges. Specifically, Section 307(b) of the Clean Water Act requires the EPA Administrator to establish pretreatment standards for the introduction of pollutants into publicly owned treatment works (POTWs) that, inter alia, "would interfere with the operation of such treatment works." 33 U.S.C. §1317(b). "Treatment works," as defined in the Act, include processes for the ultimate disposal of sludge. 33 U.S.C. §1292(2)(A). Hence, the pretreatment standards developed by the Administrator must establish controls on pollutants that interfere with sludge disposal by the Authorities.

122. EPA has established pretreatment standards, set out at 40 C.F.R. Part 403, which became effective on March 30, 1981. These "General Pretreatment Regulations" provide that: "Pollutants introduced into POTWs by any non-domestic source shall not ... Interfere with the operation or performance of the works." "Interference" is defined to include discharges into a POTW that cause or significantly contribute to:

the prevention of sludge use or disposal by the POTW in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act ..., the Clean Air Act, and the Toxic Substances Control Act. 40 C.F.R. §403.3(i).

123. Industrial discharges into the Authorities' POTWs are interfering with sludge use and disposal by the Authorities. As noted above (paragraphs 72-77), all of the Authorities have selected some type of thermal reduction alternative to ocean dumping. Out of concern that resulting air emissions might violate Clean Air Act standards, EPA and DEP have yet to give final approval to any of these alternatives. DEP has recently stated that industrial pretreatment--which would result in reduced air pollution from the Authorities' thermal reduction facilities--might well be necessary before some or all of these facilities could be approved. That is, pretreatable industrial discharges are interfering with some or all of the Authorities' selected thermal reduction alternatives. Pretreatment would prevent this interference.

124. Industrial pretreatment would also prevent interference with land application alternatives (to the extent such interference exists) by minimizing the risk of food chain and groundwater contamination from land-applied sludges.

125. Industrial pretreatment might also prevent interference with the safe ocean disposal of the Authorities' sludges, to the extent that such pretreatment would enable the sludges to meet EPA's environmental impact criteria.

126. EPA has delegated to DEP the primary responsibility for enforcing the Clean Water Act's pretreatment requirements, with EPA retaining a secondary enforcement responsibility. 47 Fed. Reg. 17331 (April 22, 1982). DEP and EPA have yet to fulfill their legal mandate to compel the Authorities to implement industrial pretreatment programs as needed to remove pollutants that interfere with the management of the Authorities' sludges. Until they do so, DEP and EPA are in violation of Section 307(b) of the Clean Water Act.

127. The failure of the Defendants to implement and enforce industrial pretreatment programs as needed to prevent interference with the safe management of the Authorities' sludges threatens the health and safety of the Plaintiffs' members.

COUNT IV

VIOLATIONS OF GRANT CONDITIONS

128. Over the past ten years, the Authorities have received millions of dollars in federal grant money to design and construct wastewater treatment and sludge disposal facilities. These grants were awarded pursuant to Section 201 of the Clean Water Act. 33 U.S.C. §1281.

129. Three of the Authorities received federal grants that included a special condition requiring the development of a program to eliminate ocean disposal of sludge. PVSC received such a grant for \$12.5 million in 1973; JMEUC for \$39.6 million in 1973, and BCUA for \$7.6 million in 1974. In each case, the relevant grant condition reads as follows:

The Grantee shall develop an acceptable sludge management program to eliminate ocean disposal and shall cooperate in the course of program development with EPA in exploring cooperative and joint solutions with other operating agencies. The program is to be fully developed and submitted for the approval of NJSDEP and EPA by June 30, 1976 and is to provide for operation of the program by June 30, 1977.

130. The Authorities have received and obligated these federal grant funds. None of the Authorities have complied with the grant condition, nor has EPA acted to compel compliance. EPA's refusal to compel compliance with these conditions, while permitting the Authorities to spend the related grant funds, was arbitrary and capricious and an abuse of agency discretion.

131. In failing to comply with the above-cited grant conditions, the three Authorities are in violation of a limitation imposed by the EPA Administrator under the Clean Water Act. Such violation is actionable under the citizen suit provision of the Clean Water Act, which gives Plaintiffs the right to bring a court action to enforce a "limitation" imposed under the Act.

132. The failure of the Administrator to enforce this limitation in the Authorities' wastewater treatment grants threatens the health and safety of the Plaintiffs and their use and enjoyment of coastal marine resources that are continuing to be degraded as a result of the violations.

VI. PRAYER FOR RELIEF

WHEREFORE, Plaintiffs request that this Court grant the declaratory and injunctive relief specified below.

A. Declaratory Relief

Plaintiffs request that this Court issue a declaratory judgment that:

(1) Defendants EPA Administrator Gorsuch, EPA Regional Administrator Schaeffer, and the six New Jersey Sewerage Authorities, by permitting and directing the ocean dumping of sewage sludges that fail to meet the "trace contaminants" criteria set out at 40 C.F.R. §227.6, are in violation of prohibitions in the London Dumping Convention against the dumping of "Annex I" constituents as more than trace

contaminants, and of 33 U.S.C. §1412(a), which makes the requirements of the Convention binding upon the EPA Administrator;

(2) Defendants EPA Administrator Gorsuch, EPA Regional Administrator Schaeffer, and the six New Jersey Sewerage Authorities, by permitting and directing the ocean dumping of sewage sludges that fail to meet EPA's "limiting permissible concentration" test, and other environmental impact criteria set out at 40 C.F.R. Part 227, are in violation of the 1977 Amendment to the MPRSA, 33 U.S.C. §1412(a), which prohibits the ocean dumping of such sludges after December 31, 1981.

(3) Defendants EPA Administrator Gorsuch, EPA Regional Administrator Schaeffer, and the six New Jersey Sewerage Authorities, by permitting and directing the ocean dumping of contaminated sewage sludges without a determination that there is a "need" for such dumping pursuant to 40 C.F.R. §§227.2(a), 227.2(b), 227.3(b) and §227.14-227.16, are in violation of the MPRSA and implementing regulations.

(4) Defendants EPA Administrator Gorsuch, EPA Regional Administrator Schaeffer, and the six New Jersey Sewerage Authorities are in violation of the MPRSA and implementing regulations by permitting and directing the ocean dumping of sewage sludges that are not sufficiently described pursuant to 40 C.F.R. §227.5(c), have not been shown to meet the pathogen risk criterion pursuant to 40 C.F.R. §227.7(c), and have not been shown to meet the carcinogen risk criterion pursuant to 40 C.F.R. §227.6(a)(5).

(5) Defendants EPA Administrator Gorsuch and DEP Commissioner Hughey, by failing to require the Authorities to implement and enforce industrial pretreatment programs as needed to prevent interference with the safe management of the Authorities' sludges, are in violation of Section 307(b) of the Clean Water Act, 33 U.S.C. §1317(b), and implementing regulations, 40 C.F.R. §§403.1, 403.3, and 403.5.

(6) Defendants Passaic Valley Sewerage Commissioners, Joint Meeting of Essex and Union Counties, and Bergen County Utilities Authority are in violation of "limitations" imposed by the EPA Administrator under the Clean Water Act by failing to comply with conditions in their federal wastewater treatment grants which required them to develop programs to eliminate the ocean disposal of sludge as a condition of their receipt of federal wastewater treatment grant funds.

B. Injunctive Relief

(1) Plaintiffs request that this Court issue a mandatory injunction compelling Defendant EPA Administrator Gorsuch, in consultation with the other Defendants, to develop for each Authority new implementation schedules which incorporate detailed timetables for the phase-out of ocean dumping and the implementation of land-based sludge management alternatives. Such implementation schedules should:

(a) Establish a reasonable date for the total cessation of ocean dumping by the Authorities;

(b) Require each Authority to submit to DEP and EPA, within a reasonable period following the issuance of this injunction, its revised plan for developing and implementing a land-based sludge management program;

(c) Incorporate a timetable showing the dates by which major milestones in the development of the selected sludge management alternatives are to be completed by each Authority, including, if appropriate, dates for the construction of dewatering facilities;

(d) Establish an expeditious "pretreatment" timetable showing the dates by which each Authority shall:

o identify the major industries discharging contaminants into its treatment works,

o identify the extent to which such contaminants can be removed at the source (by pretreatment or otherwise),

o identify the extent to which interference with reasonably available land-based alternatives can be prevented by an industrial pretreatment program, and

o establish the dates by which the industrial pretreatment program must be implemented and enforced by each Authority as needed to prevent interference with its selected sludge management alternative;

(e) Establish a reasonable date by which each Authority should submit to EPA and DEP a report designating sufficient land areas, as appropriate, for the composting or land application of sludge, for the disposal of incinerator ash, and/or for the construction of sludge management facilities;

(f) Provide that each Authority shall submit monthly progress reports to EPA and DEP, with a copy to Plaintiff National Wildlife Federation, indicating the extent of compliance or non-compliance with the implementation schedule and identifying any major anticipated obstacle to future compliance;

(g) Establish an abatement schedule for the phase-out of sludge dumping, corresponding to the anticipated time needed to implement, and bring to full capacity, each Authority's selected land-based sludge management program.

(2) Plaintiffs further request that this Court issue a mandatory injunction compelling Defendant DEP Commissioner Bughey, in consultation with EPA, to:

(a) Expeditiously revise the State of New Jersey's criteria for prioritizing applications for federal wastewater treatment grants (pursuant to 33 U.S.C. §1281) so as to reestablish the Authorities' priority status for the receipt of such grants for the design and construction of land-based sludge management facilities;

(b) Revise the State wastewater treatment grant priority list accordingly; and

(c) Within a reasonable period following this injunction, submit the revised priority list to EPA for approval.

(3) Plaintiffs further request that this Court issue a mandatory injunction:

(a) Compelling Defendants DEP Commissioner Hughey, EPA Administrator Gorsuch, and Regional Administrator Schaeffer to review and issue, on an expedited basis, and in accord with applicable law, all priority lists, grant applications, grants, permit applications and permits as may be required for the implementation of the Authorities' sludge management programs; and,

(b) Compelling the Authorities to make timely application for such permits and grants in accord with applicable law and regulations;

(4) Plaintiffs further request that this Court issue a mandatory injunction compelling the Authorities to include in their quarterly sludge management reports submitted to EPA--in addition to the information currently included in such reports--the following information (as is needed to determine if the sludges comply with EPA's environmental impact criteria):

(a) The results of analytical determinations of the following parameters:

o The concentrations of polycyclic aromatic hydrocarbons and any other known or suspected carcinogens, mutagens, or teratogens, and documentation that such substances are not present as more than trace contaminants;

o The concentrations of organohalogens for which EPA has established marine water quality criteria;

o The concentrations of organohalogens for which EPA has not established marine water quality criteria which the Authorities have reason to believe may be present in their sludges in measurable concentrations;

(b) The results of bioaccumulation tests performed on appropriate test species for cadmium, mercury, PCBs, DDT, and

petroleum hydrocarbons under conditions which provide assurance that no significant undesirable effects will occur;

(c) The results of analytical determinations of the levels of pathogenic viruses, bacteria, and protozoa, as specified by EPA, and the reaction of such pathogenic microorganisms to seawater.

(5) Plaintiffs further request that this Court issue a mandatory injunction compelling Defendant DEP Commissioner Hughey to publish, within 9 months of the date of the issuance of this injunction, a statewide sludge management strategy. Such strategy, as required by New Jersey statute (N.J.S.A. 13:1E-43) "shall provide for the maximum practical processing of all sludge generated in the State following the adoption of such plan, and for the processing or land disposal of any such sludge generated within the State..." Such strategy should incorporate the timetables for the phase-out of ocean dumping by the Authorities as ordered by this Court.

C. Modification of Existing Settlement Agreements

Plaintiffs request that this Court modify the settlement agreements adopted in the Final Judgments entered by this Court on May 13, 1982 (Civil Action Nos. 81-1017, 81-1015, 81-1066, 81-1008, 81-1018, and 81-17) to reflect the Court's decision with respect to this Prayer for Relief.

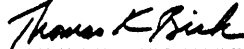
D. Attorney Fees

Plaintiffs request that this Court award Plaintiffs their costs and reasonable attorney fees as provided by the citizen suit provisions of the Clean Water Act, 33 U.S.C. §1365(d), and the Marine Protection, Research, and Sanctuaries Act, 33 U.S.C. §1415(g)(4).

E. Other Relief

Plaintiffs request that this Court grant such further relief as it may deem just and proper.

Respectfully submitted,



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ATTORNEYS FOR PLAINTIFFS

EXHIBIT III

UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF FLORIDA
TAMPA DIVISION

MANATEE COUNTY,)	
)	
Plaintiff, and)	
)	
CITY OF HOLMES BEACH, FLORIDA, and)	
CITY OF ANNA MARIA, FLORIDA,)	
)	
Plaintiff/Intervenor,)	
)	
v.)	Case No. 82-248-Civ-T-QC
)	
ANNE GORSUCH, etc., et al.,)	
)	
Defendants, and)	
)	
TAMPA PORT AUTHORITY,)	
)	
Defendant/Intervenor.)	

AFFIDAVIT OF RAYMOND H. LEWIS

STATE OF FLORIDA)
)ss
COUNTY OF DADE)

BEFORE ME, the undersigned authority, personally appeared
Raymond H. Lewis, who, being first duly sworn, deposes and says:

1. I am currently employed at the University of Miami's
Rosenstiel School of Marine and Atmospheric Sciences as a
research assistant.

2. I was formerly employed by Jones, Edmunds & Associates
(JEA) of Gainesville, Florida, and worked as an environmental
specialist from August of 1978 through December 30, 1980. During
that period, I was involved in the performance of numerous
bioassay tests involving the Corps/EPA procedures, including
tests occurring in Charleston, South Carolina; Long Beach, North
Carolina; Lake Lanier, Georgia; Jacksonville, Florida; and
Gainesville, Florida.

3. In the spring of 1979, I took part in the bioassay
testing of sediments from Port St. Petersburg and Bayboro Harbor
in St. Petersburg, Florida. My responsibilities in this
particular bioassay were to gather the sediment samples to be
used in the testing and to assist Mary Leslie and Christine

EXHIBIT F
PEEPLE EARL REYNOLDS & BLANK
PROFESSIONAL ASSOCIATION
ATTORNEYS AT LAW

Newman in the actual performance of the bioassay tests. Clyde Wigginton and Michael Crezee were also involved in this project.

4. Initially, Clyde Wigginton and I collected sediment samples from three different stations in Port St. Petersburg. Those sediment samples were transported to JEA labs in Gainesville for testing by me and other JEA personnel.

5. Bioassay tests were performed on the sediments from the three stations sampled. The results of the testing conclusively showed that the sediments from Station No. 2 were very toxic, and they therefore failed the bioassay test. After informing my superiors of the failure, we performed another set of bioassay tests on other sediment samples from the same three locations, and again the sediments from Station No. 2 failed.

6. After the failure of the sediments from Station No. 2, I was instructed to move the sampling location to an area that would yield "acceptable sediments." Therefore, Christine Newman and I returned to Port St. Petersburg and collected samples from the two stations that had passed the bioassay tests (Stations 1 and 3) and from a new fourth station. The samples from stations 1, 3, and 4 were then transported to Gainesville for further bioassay testing, and this time they passed.

FURTHER AFFIANT SAYETH NOT.

Raymond H. Lewis

Sworn to and subscribed before me this 20 day of September, 1982.

W. Larry J. Ferguson
Notary Public, State of
Florida At Large

My Commission Expires:

SEP 20 1985

PEEPLER, EARL REYNOLDS & BLANK
PROFESSIONAL ASSOCIATION
ATTORNEYS AT LAW

EXHIBIT III (cont'd)UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF FLORIDA

TAMPA DIVISION

MANATEE COUNTY,

Plaintiff,

CITY OF HOLMES BEACH, FLORIDA,
CITY OF ANNA MARIA, FLORIDA,

Plaintiff/Intervenor,

v.

Case No. 82-246-Civ-T-GC

ANNE GORSUCH, etc., et al.,

Defendants,

TAMPA PORT AUTHORITY,

Defendant/Intervenor.

AFFIDAVIT OF CHRISTINE NEWMAN

STATE OF FLORIDA

COUNTY OF *Hillsborough*)
) ss
)

BEFORE ME, the undersigned authority, personally appeared Christine Newman, who, being first duly sworn, deposes and says:

1. My name is Christine Newman. I reside at 14002 Clubhouse Circle, Apartment 201, Carrollwood, Florida.

2. I am a former employee of Jones, Edmunds & Associates ("JEA") of Gainesville, Florida, and my responsibilities included, among other things, performance of bioassay tests.

3. During my employment with JEA, it was retained by the Army Corps of Engineers in the spring of 1979 to conduct bioassay tests on materials to be dredged from Port St. Petersburg and Bayboro Harbor for ocean dumping.

4. Sediment samples from three stations in Port St. Petersburg were initially collected by Ray Lewis and Clyde Wigginton. After those sediment samples were transported to the JEA labs in Gainesville, the actual bioassay tests were run by me and other JEA personnel.

EXHIBIT G

5. The sediment samples from one of the stations, however, failed the bioassay tests because the sediments were too toxic.

6. Ray Lewis and I were directed by JEA to return to Port St. Petersburg to collect new sediment samples. We collected sediment samples from the same two stations that had previously passed the bioassay tests, and, in compliance with our instructions, also from a new fourth station (which was different from the third station that had failed the bioassay tests). Bioassay tests were then performed on those new sediment samples, and they passed.

FURTHER AFFIANT SAYETH NOT.

Christian T. Lewis

Sworn to and subscribed before me this 22nd day of September, 1982.

Shawn M. Delaney
Notary Public, State of
Florida At Large

My Commission Expires: 10-21-83

Mr. D'AMOURS. I appreciate that very able summary, and I will, as I said, avail myself fully of your testimony.

On page 7 of your written testimony, which is now part of the record, you state that the mandamus provision, coupled with the mandatory site designation, might have some unintended effects. As you know from your being in the room when the EPA witnesses testified, they had problems with that also.

I wonder could you elaborate on that, and give me some examples of what you think those problems might be.

Mr. KAMLET. I think the difficulty that we perceive, that Mr. Eidsness indicated EPA shares, is that the way the language of those provisions is worded would enable a would-be dumper to go to court, and seek a mandamus order to compel the Environmental Protection Agency to designate a brandnew ocean-dumping site which had never been interim-approved and as to which EPA never had any intention of authorizing dumping.

I think on the other hand the intent of the provision in the legislation was to provide a remedy to those concerned about dumping going on at unstudied but interim approved dump sites and provide a mechanism to insure that EPA expeditiously completes studies at those sites.

We reach somewhat different conclusions than Mr. Eidsness as to what an appropriate remedy to that concern would be. Mr. Eidsness, I gather, would advocate dropping the new mandamus authority entirely.

It seems to us that this problem can be easily rectified by just writing into this provision a trigger that provides this mandamus jurisdiction only where EPA had taken some initial step to allow dumping to go on at an unstudied dump site.

Once EPA had done that, it would then be entirely appropriate, and would avoid this problem, to enable the court to order accelerated completion of site studies for such a site.

Mr. D'AMOURS. I find that a very worthwhile suggestion, I might say, Mr. Kamlet.

On another matter I want to point out that your analysis, as to the proposed January regulation, which you know I called to Mr. Eidsness' attention, was I thought very well done, and in this case even quite productive it would seem. I wonder if you have any other such analyses you could call to the committee's attention at this time or that you might furnish us as a part of the record later.

Mr. KAMLET. Exhibit I to my prepared statement does constitute a fuller preliminary analysis of the January version of those regulations. There is one other element of that draft, which I understand is still part of the current versions under consideration at EPA, that I would like to highlight, because I think it is terribly significant and bears on a lot of the concerns that numerous members of the committee have raised today. And that is a provision that would authorize for the first time EPA to waive the need to do toxicity testing or testing on the potential to biocumulate in the food chain, dangerous contaminants from sewage sludge, and would allow the Agency to make ocean dumping decisions for sludge for the first time simply on the basis of the chemical characteristics of the sludge, and the characteristics of the proposed dumping site.

It represents a considerable backtracking of the current regulatory approach, and in our judgment is a very negative and undesirable step backward.

Mr. D'AMOURS. I appreciate that. I have no further questions at this time. Mr. Carper, do you have any questions?

Mr. CARPER. Mr. Chairman, I have no questions. I would simply like to thank Mr. Kamlet, and his colleague today for their attendance and for their testimony.

Mr. D'AMOURS. Thank you very much, Mr. Kamlet, for your patience and for your very good summary of your testimony and for your testimony.

Mr. KAMLET. I appreciate your endurance.

Mr. D'AMOURS. Now we come to our last panel of witnesses, Mr. Alfred Hammon, chairman, Harbors and Navigation Committee of the American Association of Port Authority, who is accompanied by Mr. Joseph E. LeBlanc, Jr., special counsel to Harbors and Navigation Committee, American Association of Port Authorities; and Peter J. Gatti, Jr., counsel for Government Relations, American Association of Port Authorities.

Gentlemen, I welcome you and we await your testimony.

STATEMENT OF ALFRED HAMMON, CHAIRMAN, HARBORS AND NAVIGATION COMMITTEE, AMERICAN ASSOCIATION OF PORT AUTHORITIES, ACCOMPANIED BY JOSEPH E. LeBLANC, JR., SPECIAL COUNSEL TO HARBORS AND NAVIGATION COMMITTEE, AMERICAN ASSOCIATION OF PORT AUTHORITIES; AND PETER J. GATTI, JR., COUNSEL FOR GOVERNMENT RELATIONS, AMERICAN ASSOCIATION OF PORT AUTHORITIES

Mr. HAMMON. Thank you, Mr. Chairman.

I would just like to point out that Mr. LeBlanc is to my right and Mr. Gatti is to my left.

Mr. Chairman and members of the subcommittee, my name is Alfred Hammon. I am going to try to summarize the key points of my statement in the interests of the lateness of the day and the time available to us.

I am appearing here today as chairman of the Committee on Harbors and Navigation of the American Association of Port Authorities which is a professional and trade association comprised of more than 130 public port agencies as corporate members and an additional 250 firms and individuals as contributing, associate or honorary members concerned with port matters.

The committee which I chair is responsible for addressing problems facing AAPA member ports relating to the disposal of dredged material.

I would like to begin by expressing the appreciation of the AAPA at the opportunity to present here today testimony upon amendments that have been proposed to the Marine Protection, Research and Sanctuaries Act.

AAPA has a very vital interest in these amendments and in the manner in which the entire ocean-dumping permit program for dredged material is administered.

U.S. ports play a key role in meeting the economic, trade and defense needs of this country. The extent of our Nation's dependence

upon port operations may readily be seen in the summary fact sheet that has been prepared by the AAPA, a copy of which is attached to this statement.

The experience of AAPA member ports over the past 5 years has called attention to very fundamental aspects of the Marine Protection, Research and Sanctuaries Act that have failed to meet the needs of the U.S. port industry and that urgently require change.

It is against this background that the AAPA appears before the subcommittees today.

I might ask, Mr. Chairman, though I am going to eliminate certain portions of my statement, I would ask that the full statement would appear in the record.

Mr. D'AMOURS. Of course, Mr. Hammon. Your entire statement will appear in the record just as you have submitted it.

Mr. HAMMON. Thank you very much.

Before beginning my testimony on H.R. 1761, I would like to call the subcommittee's attention to a separate bill to amend the Marine Protection, Research and Sanctuaries Act that has been prepared by the AAPA for members of the subcommittees and I would like to ask that a copy of this AAPA bill be included in the record of this hearing as part of our submission.

Turning now to the particular matter before the subcommittees, H.R. 1761, the AAPA wishes to express the following views concerning certain features of the bill.

Mr. Chairman, I am going to make reference to the provisions in the act being amended by H.R. 1761, and though my statement makes reference also to the sequence in H.R. 1761, these particular references will be to the act as now in existence.

First of all, section 102(c)(1). The AAPA believes that any listing of factors that should be specifically taken into account in the site designation process should include appropriate consideration of economic limitations that may exist in the use of a site for the disposal of dredged material.

To achieve this result, AAPA would propose the addition of a new subsection E to section 102(c)(1) to read as follows:

"The practical availability and economic feasibility of the site for the disposal of dredged material."

Next is section 102(c)(2)(A). AAPA is concerned about the establishment of a mandatory monitoring requirement for each site for which the Administrator determines that such monitoring is necessary to accomplish the purposes of title I.

Such a general requirement might be asserted as requiring (i) monitoring by the Administrator where no adequate funding is available, or (ii) monitoring by the permittee at unreasonable or impossible cost and expense.

The expansive definition of monitoring in section 6 of the bill makes these cost considerations very real ones, and the transitional provisions of section 5, which would make these monitoring requirements immediately applicable, make this a concern which must be addressed before any adoption of this requirement.

AAPA also has concern that, if monitoring is not undertaken for these cost reasons, there may be a second guessing of the Administrator as to whether monitoring should have been required, with

objection to continued use of a site for alleged lack of required monitoring.

AAPA would propose to guard against such a result by providing that monitoring will be required only at sites for which, in addition to other requirements, such monitoring is shown to be economically justified.

I have some references in the statement on section 103(b) which I will delete which will be part of the record in the full statement and I will move on to section 104(a)(5).

Here AAPA believes that any special provisions included in dredged material permits to minimize the harm from dumping should not only be necessary but appropriate under the circumstances.

Reference to appropriateness would assure that considerations of cost and practicability will be taken into account. With respect to the provisions in section 104(a)(5) (A)-(C) for the imposition of affirmative obligations upon permittees such as the development, acquisition or implementation of alternatives for disposal, or processes for reducing, eliminating or recycling contaminants, AAPA feels that such actions are inappropriate and unwarranted as permit conditions.

In the view of AAPA, when the statutory standard of unreasonable degradation or endangerment is satisfied, a permittee should be entitled to issuance of a permit without the imposition of additional requirements that go beyond meeting the statutory standard.

Moreover, when consideration is given to the other monitoring, reporting, and surveillance requirements proposed in this bill and considering the extensive factors including the availability of alternative means and methods of disposal that must be considered in the evaluation of the permit, these additional obligations seem particularly unwarranted, and would only impose unreasonable and unjustified costs upon ports as permit applicants.

I will also dispense with a discussion of section 104(a)(6) and I will move on to section 104(b). This provision provides for the recovery of a processing fee from the permit applicant in an amount commensurate with the reasonable administrative costs incurred or expected to be incurred by the Administrator or Secretary in processing the permit. It is the understanding of the AAPA that this language would not allow the imposition of fees to recover costs associated with research and development, monitoring or sampling, preparation of environmental impact statements, or the like.

This limitation is especially necessary in the case of most ports, which, as public bodies are subject to funding limitations not applicable to private parties.

With this limitation, and with the further recommendation that the Administrator or Secretary may, as opposed to shall, prescribe and collect such fees, the AAPA is able to express support for the amendment.

At this point, Mr. Chairman, I am going to make reference to H.R. 1761 sections, and in this particular case section 4 titled "Convention Adherence."

(a) page 6, section 106(g), this provision contains proposed convention adherence language. It is intended to replace the existing provisions of section 102(a) that already require the Administrator to

apply the requirements of the convention, including its annexes, in establishing or revising the section 102(a) criteria.

We understand that concerns have been expressed, primarily by the National Wildlife Federation, that unless this new convention adherence language is adopted, the Secretary would not be required to apply convention requirements in the issuance of dredged material permits under section 103.

The AAPA submits that this is not the case.

In the issuance of dredged material permits under section 103, the Secretary is required to apply the section 102(a) criteria, which under existing language must take into account convention requirements.

This existing language has been approved by the U.S. Court of Appeals for the District of Columbia Circuit as fully satisfying U.S. obligations under the convention. *National Wildlife Federation v. Costle*, 629 F. 2d 118 (D.C. Cir. 1980).

In view of the adequacy and approval of the existing convention language, the AAPA does not see a need to adopt the new convention provisions proposed in H.R. 1761.

The AAPA does, however, see a very real risk in adopting this new language, as presently written. The convention is not self-executing, that is, it has no force and effect except insofar as it is implemented through domestic law and regulation, in this case the MPRSA and regulations promulgated thereunder.

The proposed convention adherence language, however, does not relate convention requirements to the implementing measures needed for their applicability, as is done in the existing language of section 102(a) for application of convention requirements in establishing or revising the section 102(a) criteria.

The proposed new language refers only to application of convention requirements by the Administrator or the Secretary.

As so worded, it might be urged as requiring direct application for convention requirements that are not self-executing and that are not applied directly by other countries signatory to the convention.

Convention provisions are recognized as requiring implementation by each contracting party through their respective national authorities.

For these reasons, the AAPA does not believe it is necessary to add new convention adherence, language to the statute. Nevertheless, if the subcommittees do wish to proceed with adoption of additional language relating to the convention, the AAPA would propose the following language in lieu of that set forth in H.R. 1761:

To the extent that they may do so without relaxing and consistent with the requirements of this title, the Administrator and the Secretary in establishing or revising standards, criteria and procedures to implement this title shall adhere to and apply the requirements of the convention, including its annexes, that are binding upon the United States.

The above language would satisfy legitimate concerns as to whether convention requirements apply to actions of the Secretary.

At the same time, by relating applications of convention requirements to the establishment or revision of standards, criteria, and procedures to implement the provisions of title I, the language would recognize that the convention is not self-executing, but only

has force and effect insofar as it is implemented through appropriate law and regulation.

The above language also provides that convention requirements are to be applied to the extent that they do not relax and are consistent with the provisions of the MPRSA.

This consistency reference is new and is designed to avoid any basis for assertion of a conflict between the convention and the statute that would alter or affect the balance of interests struck by the Congress in its passage of the MPRSA.

I have with me today Mr. Joseph LeBlanc, our counsel, as indicated earlier, and who would be happy to assist me in responding to any of your questions after your statement on this particular provision.

Next I would like to address in H.R. 1761 section 5, transitional provisions. AAPA supports the approach taken in the transitional provisions to allow continued use of interim designated sites for dredged material until completion or denial of site designation by the Administrator.

However, AAPA is concerned about application of the monitoring requirements of section 102(c)(2) and the provisions in section 102(c)(3) for limitation, suspension, or termination of site use during the interim period until final site designation or denial.

These provisions, as to which AAPA has previously expressed substantive concern, could emasculate the effect of the transition provisions and result in termination of interim site use, with corresponding interference with essential port operations.

AAPA also notes a certain inconsistency in applying extensive monitoring requirements to interim sites. Until final designation or denial, the future or long-term use of these sites will not be known.

Monitoring prior to that time, especially to the extent provided in section 6, would appear to be unnecessary, premature, and a poor allocation of limited resources.

AAPA recommends that the provisions of section 102(c) (2) and (3) not become applicable until final site designation or denial, in the same manner as section 102(c)(1).

(5) Section 6. Definitions, page 7, lines 16-25, and page 8, lines 1-12.

AAPA has serious concerns about the breadth of the proposed definition of "Monitoring", particularly in view of the "monitoring" required in Section 102(c)(2)). While the monitoring proposed in the definition may be of academic interest, it is unrealistic, unreasonable, and excessive as a fixed requirement for managing the acceptable disposal of dredged material. The full extent of such "monitoring" will not be necessary, appropriate, or economically justifiable at many sites, even those for which "some monitoring" may be in order.

The parameters and scope of monitoring, and the appropriateness of monitoring protocols, must be determined on a case-by-case basis, through the development and application of regulations, guidelines, and implementation manuals subject to appropriate debate within the scientific community. The nature and extent of monitoring should not be prescribed as a matter of statutory requirement. The need to avoid inflexibility is especially acute in view of the enormous time, cost, and expense that would be in-

volved at sites for which the monitoring described in section 6 is required.

(6) Section 104(h) [Existing Provisions].

This provision, enacted only this past December as section 424 of the Surface Transportation Assistance Act of 1982, establishes a 2 year moratorium against the ocean disposal of "low level radioactive wastes." The concern of the AAPA is that this prohibition might be construed to apply to dredged material—a construction that would effectively halt all dredging operations that depend upon ocean disposal since virtually all harbor sediment contains naturally occurring radioactive isotopes.

Although the committee report on this language indicates that it is not intended to apply to background levels of radioactivity—such as occur in dredged material—there is no exception for dredged material in the statute. Because of questions that have been raised as to whether dredged material is actually excluded from the moratorium, and because of the overriding importance to ports that such an exclusion be recognized, the AAPA urges the subcommittees to adopt the following language of exclusion, to be inserted in section 104(H) line 5, following the word "waste" and before the word "unless": "(excluding material not considered to be radioactive for purposes of this subsection, such as dredged material)."

This concludes my remarks upon H.R. 1761. Let me express again the deep appreciation of AAPA at the opportunity to appear before the subcommittees to express these views on the ocean dumping questions under consideration today. If there are any questions, I will be happy to answer them, or invite Mr. LeBlanc to respond.

Thank you.

[The statement of Mr. Hammon follows:]

PREPARED STATEMENT OF ALFRED HAMMON, CHAIRMAN, HARBORS AND NAVIGATION COMMITTEE, THE AMERICAN ASSOCIATION OF PORT AUTHORITIES

Mr. Chairman, and members of the Subcommittees, my name is Alfred Hammon. I am appearing here today as Chairman of the Committee on Harbors and Navigation of the American Association of Port Authorities, which is a professional and trade association comprised of more than 130 public port agencies as corporate members and an additional 250 firms and individuals as contributing, associate, or honorary members. The Committee which I chair is responsible for addressing problems facing AAPA member ports relating to the disposal of dredged material and for presenting recommendations as to needed legislative and regulatory changes in programs that affect port operations.

I would like to begin by expressing the appreciation of AAPA at the opportunity to present testimony here today upon amendments that have been proposed to the Marine Protection, Research, and Sanctuaries Act of 1972 ("MPRSA") in the bill under consideration in this hearing, H.R. 1761. AAPA has a very vital interest in these amendments, and in the manner in which the entire ocean dumping permit program for dredged material is administered. U.S. ports play a key role in meeting the economic, trade, and defense needs of this country. The extent of our nation's dependence upon port operations may be readily seen in the Summary Fact Sheet that has been prepared by AAPA, a copy of which is attached to this Statement. These functions served by U.S. ports involve an almost continuing need to dispose of dredged material—in connection with recurring maintenance dredging operations and needed harbor, marine terminal, and channel improvements. Most of our coastal ports rely, to some extent, on ocean disposal of dredged material. For many, such as the Port of New York, such disposal is crucial to survival. These dredging needs can also only be expected to increase. The experience of AAPA member ports over the past five years, however, has called attention to very fundamental aspects of the MPRSA that have failed to meet the needs of the U.S. port industry and that ur-

gently require change. It is against this background that the AAPA appears before the Subcommittees today.

Before beginning my testimony upon H.R. 1761, I would like to call the Subcommittees' attention to a separate bill to amend the MPRSA that has been prepared by AAPA—also entitled "The Ocean Dumping Amendments Act of 1983"—which will be introduced in the Congress in the near future. In it, AAPA identifies a series of changes that, in its view, must be made in the basic structure of the ocean dumping program for dredged material. Changes (and in some cases clarification) are proposed in the "standard" upon which ocean dumping permit decisions are to be made, in the list of factors to be considered in making permit decisions, and in the permit process for dredged material, including increases in permit terms for certain types of port operations, shorter limitations upon the time for permit decision, and greater specification of the role of other Federal agencies in "commenting" upon dredged material permit applications. These changes, the AAPA believes, are essential to assure that the port operations on which the economic stability and national security of this country so greatly depend will continue without disruption. For the benefit of members of the Subcommittees, I would like to ask that a copy of this AAPA bill be included in the record of this hearing as part of our submission.

Turning now to the particular matter before the Subcommittees, H.R. 1761, AAPA wishes to express the following views concerning certain features of the bill.

(1) SEC. 2. DUMPING PERMIT PROGRAM

(a) *page 3, Sec. 102(c)(1)*—AAPA believes that any listing of factors that should be "specifically taken into account" in the site designation process should include appropriate consideration of economic limitations that may exist in the use of a site for the disposal of dredged material. To achieve this result, AAPA would propose the addition of a new subsection "(E)" to Sec. 102(c)(1), to read as follows:

"the practical availability and economic feasibility of the site for the disposal of dredged material."

(b) *page 3, Sec. 102(c)(2)(A)*—AAPA is concerned about the establishment of a mandatory monitoring requirement for each site for which the Administrator determines that such monitoring is "necessary" to accomplish the "purposes" of title I. Such a general requirement might be asserted as requiring (i) monitoring by the Administrator where no adequate funding is available, or (ii) monitoring by the permittee at unreasonable or impossible cost and expense. The expansive definition of "Monitoring" in Sec. 6 of the bill ("Definitions") makes these cost considerations very real ones; and the "Transitional Provisions" of Sec. 5, which would make these monitoring requirements immediately applicable, make this a concern which must be addressed before any adoption of this requirement. AAPA also has concern that, if monitoring is not undertaken for these "cost" reasons, there may be a "second guessing" of the Administrator as to whether monitoring "should have been required," with objection to continued use of a site for alleged lack of "required monitoring." AAPA would propose to guard against such a result by providing that monitoring will be required only at sites for which, in addition to other requirements, such monitoring is shown to be "economically justified."

(c) *page 4, Sec. 103(b)*—in connection with the matters to be considered by the Secretary in issuing permits for the ocean dumping of dredged material, the AAPA proposes (i) to delete the reference to "other possible methods of disposal" and to refer instead to "the availability of other practical methods of disposal", (ii) and to require utilization of sites designated by the Administrator where "practicable" rather than "feasible". Use of the work "feasible" has recently been construed as meaning "capable of being done" *without regard to cost*. The suggested reference to "practicability" would clarify that considerations of "reasonableness" and "cost" are intended to apply.

(2) SEC. 3. PERMIT CONDITIONS

(a) *page 5, Sec. 104(a)(5)*—AAPA believes that any "special provisions" included in dredged material permits to minimize the harm from dumping should not only be "necessary" but "appropriate" under the circumstances. Reference to "appropriateness" would assure that considerations of "cost" and "practicability" will be taken into account. With respect to the provisions in Sec. 104(a)(5)(A)–(C) for the imposition of "affirmative obligations" upon permittees (such as the development, acquisition, or implementation of alternatives for disposal, or processes for reducing, eliminating or recycling contaminants), AAPA feels that such actions are inappropriate and unwarranted as permit conditions. In the view of AAPA, when the statutory standard of "unreasonable degradation or endangerment" is satisfied, a permittee

should be entitled to issuance of a permit without the imposition of additional requirements that go beyond meeting the statutory standard. Moreover, when consideration is given to the other monitoring, reporting, and surveillance requirements proposed in this bill, and considering the extensive factors (including the availability of alternative means and methods of disposal) that must be considered in the evaluation of the permit, these additional obligations seem particularly unwarranted, and would only impose unreasonable and unjustified costs upon ports as permit applicants.

(b) *page 5, Sec. 104(a)(6)*—AAPA believes that any special provisions to be included in a permit under this subsection should not only be "necessary" but "appropriate" under the circumstances.

(c) *page 5, Sec. 104(b)*—this provision provides for the recovery of a processing fee from the permit applicant in an amount commensurate with the "reasonable administrative costs incurred or expected to be incurred by the Administrator or Secretary in processing the permit." It is the understanding of the AAPA that this language would not allow the imposition of fees to recover costs associated with research and development, monitoring or sampling, preparation of environmental impact statements, or the like. This limitation is especially necessary in the case of most ports, which as "public" bodies are subject to funding limitations not applicable to private parties. With this limitation, and with the further recommendation that the Administrator or Secretary "may"—as opposed to "shall"—prescribe and collect such fees, the AAPA is able to express support for the amendment.

(3) SEC. 4. CONVENTION ADHERENCE

(a) *page 6, Sec. 106(g)*—this provision contains proposed "Convention Adherence" language. It is intended to replace the existing provisions of Sec. 102(a) that already require the Administrator to apply the requirements of the Convention (including its Annexes) in establishing or revising the Sec. 102(a) criteria. We understand that concerns have been expressed—primarily by the National Wildlife Federation—that unless this new "Convention Adherence" language is adopted, the Secretary would not be required to apply Convention requirements in the issuance of dredged material permits under Sec. 103. The AAPA submits that this is not the case. In the issuance of dredged material permits under Sec. 103, the Secretary is required to apply the Sec. 102(a) criteria, which under existing language must take into account Convention requirements. This existing language has been approved by the U.S. Court of Appeals for the District of Columbia Circuit as fully satisfying United States' obligations under the Convention. *National Wildlife Federation v. Costle*, 629 F.2d 118 (D.C. Cir. 1980).

In view of the adequacy and approval of the existing "Convention" language, the AAPA does not see a need to adopt the new Convention provisions proposed in H.R. 1761. The AAPA does, however, see a very real risk in adopting this new language, as presently written. The Convention is not "self-executing", that is, it has no force and effect except insofar as it is "implemented" through domestic law and regulation, in this case the MPRSA and regulations promulgated thereunder. The proposed Convention Adherence language, however, does not relate Convention requirements to the implementing measures needed for their applicability—as is done in the existing language of Sec. 102(a) for application of Convention requirements "in establishing or revising the Sec. 102(a) criteria." The proposed new language refers only to "application" of Convention requirements "by the Administrator or the Secretary." As so worded, it might be urged as requiring direct application of Convention requirements that are not "self-executing" and that are not applied directly by other countries signatory to the Convention. (Convention provisions are recognized as requiring implementation by each Contracting Party through their respective national authorities).

For these reasons, the AAPA does not believe it is necessary to add "Convention Adherence" language to the statute. Nevertheless, if the Subcommittees do wish to proceed with adoption of additional language relating to the Convention, the AAPA would propose the following language in lieu of that set forth in H.R. 1761:

"To the extent that they may do so without relaxing and consistent with the requirements of this title, the Administrator and the Secretary in *establishing or revising standards, criteria and procedures to implement this title* shall adhere to and apply the requirements of the Convention, including its annexes, that are binding upon the United States." (new language in italic)

The above language would satisfy legitimate concerns as to whether Convention requirements apply to actions of the Secretary. At the same time, by relating application of Convention requirements to the establishment or revision of standards, cri-

teria, and procedures to implement the provisions of title I, the language would recognize that the Convention is not "self-executing", but only has force and effect insofar as it is implemented through appropriate law and regulation. The above language also provides that Convention requirements are to be applied to the extent that they do not relax and are consistent with the provisions of the MPRSA. This "consistency" reference is new and is designed to avoid any basis for assertion of a conflict between the Convention and the statute that would alter or affect the "balance of interests" struck by the Congress in its passage of the MPRSA.

I realize that this discussion of the Convention Adherence language has been a lengthy one, but it is an area of complexity and one in which any action taken will have far reaching ramifications. If any members of the Subcommittees have further questions concerning the interplay between the Convention and the statute, I have with me here today Mr. Joseph LeBlanc, who serves as counsel to the AAPA Committee on Harbors and Navigation, who will be happy to respond to your questions.

(4) SEC. 5. TRANSITIONAL PROVISIONS, PAGE 7, LINES 5-6

AAPA supports the approach taken in the "transitional provisions" to allow continued use of interim designated sites for dredged material until completion or denial of site designation by the Administrator. However, AAPA is concerned about application of the "monitoring" requirements of Sec. 102(c)(2), and the provisions in Sec. 102(c)(3) for limitation, suspension, or termination of site use, during the interim period until final site designation or denial. These provisions—as to which AAPA has previously expressed substantive concern—could emasculate the effect of the transition provisions and result in termination of interim site use, with corresponding interference with essential port operations. AAPA also notes a certain inconsistency in applying extensive monitoring requirements to "interim" sites. Until final designation or denial, the future or long term use of these sites will not be known. Monitoring prior to that time—especially to the extent provided in Sec. 6—would appear to be unnecessary, premature, and a poor allocation of limited resources. AAPA recommends that the provisions of Sec. 102(c) (2) and (3) not become applicable until final site designation or denial, in the same manner as Sec. 102(c)(1).

(5) SEC. 6. DEFINITIONS, PAGE 7, LINES 16-25, AND PAGE 8, LINES 1-12

AAPA has serious concerns about the breadth of the proposed definition of "Monitoring", particularly in view of the "monitoring" required in Sec. 102(c)(2). While the monitoring proposed in the definition may be of academic interest, it is unrealistic, unreasonable, and excessive as a fixed requirement for managing the acceptable disposal of dredged material. The full extent of such "monitoring" will not be necessary, appropriate, or economically justifiable at many sites, even those for which "some monitoring" may be in order. The parameters and scope of monitoring, and the appropriateness of monitoring protocols, must be determined on a case-by-case basis, through the development and application of regulations, guidelines, and implementation manuals subject to appropriate debate within the scientific community. The nature and extent of monitoring should not be prescribed as a matter of statutory requirement. The need to avoid inflexibility is especially acute in view of the enormous time, cost, and expense that would be involved at sites for which the monitoring described in Sec. 6 is required.

(6) SEC. 104 (H) [EXISTING PROVISION]

This provision, enacted only this past December as Sec. 424 of the Surface Transportation Assistance Act of 1982, establishes a two year moratorium against the ocean disposal of "low level radioactive wastes." The concern of the AAPA is that this prohibition might be construed to apply to dredged material—a construction that would effectively halt all dredging operations that depend upon ocean disposal since virtually all harbor sediment contains naturally occurring radioactive isotopes. Although the Committee Report on this language indicates that it is *not* intended to apply to background levels of radioactivity (such as occur in dredged material), there is no exception for dredged material in the statute. Because of questions that have been raised as to whether dredged material is actually excluded from the moratorium, and because of the overriding importance to ports that such an exclusion be recognized, the AAPA urges the Subcommittees to adopt the following language of exclusion, to be inserted in Sec. 104(h) line 5, following the word "waste" and before the word "unless":

“(excluding material not considered to be radioactive for purposes of this subsection, such as dredged material).”

This concludes my remarks upon H.R. 1761. Let me express again the deep appreciation of AAPA at the opportunity to appear before the Subcommittees to express these views on the ocean dumping questions under consideration today. If there are any questions, I will be happy to answer them, or invite Mr. LeBlanc to respond.

Thank you.



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SUMMARY FACT SHEET

U.S. SEAPORT INDUSTRY--STRUCTURE

- 189 deepwater ports on the Atlantic, Gulf, and Pacific coasts and the Great Lakes capable of handling vessels with drafts of 14 feet or more.
- 1,456 marine terminals including 2,939 ship berthing facilities. Approximately 51 percent are publicly-owned by state and local government entities and 51 percent are privately-owned.
- Actual cash value and estimated replacement cost of all marine facilities in the U.S. is \$40.4 billion and \$54 billion respectively (in 1977 dollars).
- Total facility investment by public port authorities of \$4.86 billion, in the period 1946-1978, including \$1.6 billion for 1973-1978.
- Projected port capital expenditures for 1980-1990 will be in excess of \$5 billion.
- An industry that is overwhelmingly the product of local and private initiative and investment.

U.S. SEAPORT INDUSTRY--ECONOMIC IMPACT

- In 1980, U.S. ports accounted for:
 - more than one million jobs
 - \$66 billion in gross sales within the nation
 - \$35 billion of Gross National Product
 - \$23 billion in personal income
 - \$7.9 billion in business income
 - \$5.0 billion in state and local taxes
 - \$10 billion in federal tax and customs revenues
- The value of foreign trade equates to more than 20 percent of the value of the U.S. Gross National Product.
- Oceangoing vessels carry more than 95 percent of the tonnage in

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U.S. overseas foreign trade, all of which moves through seaports by necessity.

- U.S. waterborne foreign commerce in 1981 totaled 886.3 million short tons valued at \$318.8 billion.
- U.S. seaports provide essential services to the nation's transportation system.

U.S. SEAPORT INDUSTRY--THE NATIONAL INTEREST

- Provides the necessary transportation infrastructure to transfer cargo and passengers efficiently between ship and shore.
- Facilitates movement of U.S. exports and thus helps the nation's balance of payments.
- Provides means of entry for imports of strategic materials essential to national security - petroleum, metallic ores, etc.
- Maintains facilities needed for the deployment of U.S. military forces and for the reinforcement and support of U.S. allies in time of war or international emergency.

THE ROLE OF GOVERNMENT

STATE AND LOCAL GOVERNMENT

- Public port agencies are established, administered, and operated under state and local laws.
- Public port agencies are generally self-supporting, with revenues coming from user fees, property rentals, etc.
- Public port agencies act as local sponsors for navigation projects undertaken by federal government.

FEDERAL GOVERNMENT

- Historically has provided anchorages, harbors, main shipping channels, navigation aids, harborworks (such as breakwaters).
- U.S. Army Corps of Engineers and U.S. Coast Guard have been traditionally involved in port matters, with the Corps' involvement dating from 1824.
- The policy of non-discrimination between ports is rooted in the U.S. Constitution and various shipping acts.
- Federal investment in deepwater navigation projects is a fraction

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of federal customs and vessel tax receipts collected from commerce generated by the ports. Fiscal year 1981 collections at U.S. seaports amounted to \$5.6 billion from customs duties and \$14 million from vessel tonnage fees contrast with total expenditures by the Coast Guard and Army Corps of Engineers for navigation projects of some \$700 million.

- Federal investment in deepdraft navigation from 1824 through FY 1979 amounted to around \$4.4 billion; investment in port facilities by non-federal entities amounted to at least \$5 billion for the 1946-1980 period.

THE COSTS OF SEAPORT OPERATION

- Seaports are largely dependent on revenues generated by operations and to a lesser extent, on state and local tax monies.
- Many are required to be financially self-supporting under state law.
- Most seaports have only marginal returns, ranging from +2 to -2 percent.
- Inflation has significantly raised the cost of land, equipment, construction, fuel, and all other aspects of marine terminal expansion and operation. The high cost of capital also affects the ability of ports to provide new or expanded facilities.
- Compliance with federal health, safety, security and environmental protection has added significantly to the burden of public port costs - \$194 million in the period 1970-1976 alone.
- Excessive delays in the processing of federal permits needed to proceed with essential terminal and navigation projects mean even higher costs, economic losses, and actually threaten to shut down some U.S. ports.

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Mr. D'AMOURS. We thank you, Mr. Hammon, for your testimony and your patience in waiting four hours do give it. The Chair is personally acquainted with Mr. Joseph LeBlanc and very respectful of his abilities and knowledge in the area, I want to assure you.

Starting with your last point you made on the moratorium on nuclear waste disposal, I sometimes think that AAPA tends to be extremely guarded. I am a belt and suspenders guy myself I am interested in doing something carefully and in getting it done, but you people are really careful. Are you really worried that somehow the 2-year moratorium on low-level radioactive waste is going to apply to dredged materials?

You say yourself that the committee report clearly said that we don't intend this moratorium to apply to dredged materials. The provision, that is now law, that Mr. Anderson attached to the highway bill was lifted from the Merchant Marine and Fisheries Committee bill—H.R. 6113—where that report language was included. When Mr. Anderson attached it, his remarks included a statement that the provision is not intended to apply to materials containing only background levels of radioactive contamination.

Do you really think that is not enough?

Mr. HAMMON. Let me start it off and then I will ask Mr. LeBlanc to join me in this answer. Perhaps we would worry less if the statute were explicit. Perhaps that is the starting answer. I am aware on the international scene that there are some efforts underway that question whether or not dredged material would be subject to this kind of restriction. I think Mr. LeBlanc is more acquainted with that, and I think, of course, there are a series of events, a chain of events here that dealt with this in legislation.

For example, if the convention were for some reason or another made to be self-executing and after, at the international level, let's say at the London Convention, the dredged material would not receive an exclusion, there could be a construction later on that could seriously affect the port industry, but perhaps Mr. LeBlanc would like to add to that.

Mr. D'AMOURS. Before he does, are you aware that if any amendments are approved by the contracting parties to the London Dumping Convention, the United States would be free under the Convention to disassociate itself from and not be bound by it?

Mr. HAMMON. That is what has been worrying us a little bit.

Mr. LEBLANC. Yes, Mr. Chairman, I think in that regard, if action taken at the convention, either expressly or perhaps even impliedly were to be considered an amendment, the United States, and I think the procedure is, would have to register its disassociation from that amendment within 100 days of the action taken at the consultative meeting.

We are also aware that at the Seventh Consultative Meeting that just was completed in London in February, that a resolution was passed calling for a suspension or moratorium against disposal of low-level radioactive wastes during the period of time that the ad hoc scientific group or other expert bodies will be reviewing the matter.

We also note the resolution did not contain any express exclusion for dredge material, although the IAPH, the International Association of Ports and Harbors and I believe the Federal Republic of

Germany and Russian delegations all expressed the view that certainly such a prohibition should not be viewed as applying to background levels such as occur in dredge material.

I think what we have is a situation where there is not an intent to reach dredge material, but the concern is that you have a statute on the books that is worded broadly enough that someone may raise the argument that it does, and then you are left with the argument that there is no ambiguity in the statute the way it is written, and there is not occasion to resort to committee reports.

Mr. D'AMOURS. I can't quibble that someone may raise that argument. Someone could raise any argument. I am just reacting in mild frustration to what I see, as I have already identified, as an extremely cautious approach on the part of AAPA.

Now, by itself that is absolutely harmless, of course, but whereas here we are trying to pass a compromise version of legislation that is going to bring progress in our abilities to designate and monitor ocean-dumping sites, it could be that your approach just might make the process a lot more difficult than it otherwise needs to be.

I am asking if you could see your way clear to allow us to proceed under the usual reasonable procedures that Congress implements to arrive at decisions.

Congress has never passed a law that I could go home to my constituents, or any Member could, and guarantee that nobody might not challenge that law in court. There is just no such level of assurance. We can't give it to you and I don't think anybody can. I guess that is not a question at this point, Joe. It is a statement.

I do think you can get so darn cautious that you can inhibit the process from operating as it should by seeking guarantees and assurances that only God could probably give.

Mr. LEBLANC. Mr. Chairman, if I may, we took the same view of the moratorium as you have just expressed until this past January, and it was with, I might say, no little shock and dismay that at a meeting of the Ocean Dumping Advisory Committee that was called to formulate the positions to be taken by the United States in London, that we were told that there was some doubt as to whether dredge material was indeed excluded from the moratorium, notwithstanding the reference in the committee report language.

Prior to that time the AAPA was entirely satisfied that dredge material was not covered by the moratorium, and it was only at that point that we saw a need to seek some clarification, because the question—

Mr. D'AMOURS. Did that emanate from the EPA?

Mr. LEBLANC. Yes, sir, and if I recall, it was at the January 5 meeting of the Ocean Dumping Advisory Committee, and we were very concerned about that.

Mr. D'AMOURS. EPA, for all of its power, doesn't have the power to change U.S. statute or congressional intent when it is entirely expressed, but be that as it may, I have another question.

On page 5 of your testimony you indicate that permit conditions should be appropriate as well as necessary. What leads you to believe that the Administrator or the Secretary would not apply appropriate conditions? Why do you think this has to be added?

Mr. LEBLANC. Mr. Chairman, our concern is not so much that he wouldn't be inclined to take considerations of appropriateness into account. Our concern is that since the statute refers only to necessity, that he may be faulted or attacked, if you will, particularly in litigation, as having a situation where he would find it necessary to impose certain conditions, but because of cost considerations or considerations of practicality, he would not.

For that reason, since he was not authorized by the statute to take that into account, it could be a source of litigation, and I think this is a very real concern, if you look at much of the litigation that has transpired under the Clean Water Act and under the Clean Air Act, in terms of the degree to which economic considerations can be taken into account in establishing different degrees of control and in establishing different permit conditions.

Again, we don't think there is that much of a dispute as to whether the agency would be willing to take it into account, but we are concerned that they may be open to the charge that they have no authority to do so, and the position of the AAPA would be there will be enough issues to be litigated about that we can't see right now, but let's at least try and take care of the ones that we can foresee in advance and hopefully, in doing that, we can minimize the prospects for future litigation.

If it can be avoided in advance with appropriate legislative action or clarification, we feel that serves everyone well.

Mr. D'AMOURS. Thank you. For the purpose of establishing your position on the record so that we could use it during markup on this matter I would now like to ask you one further question. I would like to know AAPA's response to the user fee system being proposed by EPA.

Mr. HAMMON. Mr. Chairman, I guess I would have to say we are quite concerned about it. There are several reasons that we feel this way about it. We, of course, pay a fee already for permits. I think it is in the neighborhood of about \$100. Basic administrative fees, we are certainly prepared to consider those.

Our great concern is that any fee that would include the many other costs that go into let's say site designation, site management, research and development, we have been given some figures, and this may be just at the beginning of the threshold of what these fees could be, upward of \$25,000 for a permit. One just doesn't know at this point. That is one of the problems we face. We really don't know except we can imagine it would be quite enormous, particularly if the proviso was fairly open-ended.

As you know, we already pay somewhere in the neighborhood of perhaps \$5,000 to \$7,000 for the various testings that are required at some of the more complicated permits. As you know, the port industry is probably also on the verge of getting user charges for waterway construction and maintenance, and this, of course, has been a difficult matter for several years.

We have also faced the possibility of even some Coast Guard user charges.

What I am really adding up to is that there is a piggy-backing of user charges which individually could be very, very lethal to the public port industry. You must realize that we, of course, are in the public sector, we serve the public interest. We ourselves are respon-

sible for generating or at least assisting in the generation of the customs revenues, which run approximately \$6 billion a year.

There is perhaps another I would say close to \$1 billion in local and Federal taxes of the industries that make use of ports. Our rate of return quite often, if you use that kind of economic indicator for the financial success of public ports, is somewhere in the neighborhood of a modest 2 to 4 percent. We are not in any position, in serving the public interest, to accept rather large imposed costs.

Mr. D'AMOURS. I appreciate that. Let me see if I can direct your attention to maybe some specific comments on a user fee (a) such as has been submitted by the EPA, or (b), such as has been commented on by prior witnesses—user fees, that is, that would be based solely upon costs of activities related to site designation, monitoring and the like.

Mr. HAMMON. It brings me back to what I said earlier. One of the problems we are facing, of course, in this whole subject, is we really don't know much about what is meant by a user fee, what it would be, what it would include, what it would cost. Certainly if there were some kind of written proposal on this subject to which we could address ourselves, it would be another question.

Mr. D'AMOURS. Let me give you hypothetically a user fee that would be based strictly upon a proration of the costs of designating, monitoring and cleaning sites.

Mr. LEBLANC. Mr. Chairman, what I think we would like to do is submit a formal position to you within the next several days in writing. We have not had a chance prior to coming here—

Mr. D'AMOURS. I appreciate that. That is fine, if you would like to take time to think about it.

Mr. LEBLANC. Would you like it in terms of continuing upon the EPA proposal that we saw this afternoon?

Mr. D'AMOURS. I would like it in terms of commenting on the EPA proposal, and also in terms of the question I just asked.

Mr. HAMMON. May I ask also, Mr. Chairman—this goes back to our first comment that both of us have made, the question of what we are talking about as to cost and the various categories covered. I recall the EPA statement talked about site designation, monitoring, various categories. I might ask, does the EPA have any cost figures that are available? It is much easier to deal with not only the types of costs to be covered, but the actual costs to be covered, and it would make it much easier for our people.

Mr. D'AMOURS. I can't get you that information, Mr. Hammon, as you well know. EPA isn't here to offer it, so you will have to answer the question without that information, I am afraid.

Mr. HAMMON. I don't think they included that in their statement. We have no idea of the quantity.

Mr. D'AMOURS. All of these statements were submitted so late that I, frankly, am not as familiar as I normally would be at this stage of the proceedings.

Mr. LEBLANC. Mr. Chairman, you would like us to address the possibility of such fees for site designation and monitoring. Were there any other generic categories?

Mr. D'AMOURS. Site cleanup should also be included.

Mr. HAMMON. I presume surveillance, which is similar to monitoring in this case.

Mr. D'AMOURS. Yes. Since you want a little time to respond to my specific question on EPA's proposal, I will have my staff send you a more specific question to which you can respond, if that will be all right.

Mr. HAMMON. Excellent, Mr. Chairman.

Mr. D'AMOURS. And you are committing yourself to answering that, so the staffs will get together. Mr. Carper, do you have any questions?

Mr. CARPER. No, sir, you already asked the question which I was most interested in, user fees, and we will just look forward to the responses from these gentlemen. Thank you.

Mr. D'AMOURS. Thank you, Mr. Carper.

Again, I want to thank this panel. Joe, it's good to see you again.

Mr. LEBLANC. It is good to see you, Mr. Chairman.

Mr. D'AMOURS. I want to thank the panel, Mr. Hammon, Mr. LeBlanc, and Mr. Gatti, for your testimony and for your patience. I also want to thank Mr. Carper for keeping me company these 4 hours and 10 minutes that we have been here.

The meeting is adjourned.

Mr. HAMMON. Thank you for hearing us all the way through.

[Whereupon, at 4:10 p.m., the subcommittee adjourned.]

[The following was received for the record:]

QUESTIONS SUBMITTED BY MR. FORSYTHE AND ANSWERED BY EPA

Question 1. I understand that NOAA and EPA recently sponsored a workshop in January in California to identify the type of information necessary to conduct multimedia analysis regarding the disposal of waste. What is the status of the results of that workshop? Do you have any indication now of the significant findings of the workshop?

Answer. EPA joined NOAA in sponsoring a National Academy of Sciences workshop in January 1983 entitled: A workshop on Land, Sea, and Air Disposal of Industrial and Domestic Wastes. The principal objective of the workshop was to determine what types of information are needed to assess the options of land, sea, and air disposal of given types of waste at particular disposal sites and to determine the environmental, economic, and public policy criteria for selection among the options. Workshop participants are now in the process of drafting the reports of each of the six panels. The National Academy plans to present a draft report to the National Research Council Report Review Committee this month with publication planned for later in the summer. At this time EPA has not been briefed on any overall findings or conclusions of the workshop, although EPA staff participants could provide personal observations if you desire. Otherwise we will provide you with a copy of the NAS report as soon as it is available or you might contact the National Academy directly, through the Board on Ocean Science and Policy, National Research Council.

Question 2. Mr. Matuszeski indicates in his testimony that NOAA and EPA are developing a multi-agency strategy for conducting research on ocean dumping of sewage sludge and dredged material. Further, he notes that EPA is preparing an ocean dumping research program plan that will be the basis for a Federal research strategy. When will EPA complete the plan and when will we see the results?

Answer. The ocean disposal research program plan is expected to be completed and available late this summer. This research plan will address activities related to ocean dumping, ocean outfalls, dredge material disposal, drilling muds disposal, oil spill containment, marine water quality, and biomonitoring techniques. These research activities will be coordinated between EPA, NOAA, and the U.S. Army Corps of Engineers. In recognition of the different types of expertise, the three agencies are attempting to gain optimal use of resources through this research plan. The research studies themselves are both short-term and long-term projects that will provide ongoing assistance to the marine programs.

Question 3. You indicate in your testimony that you are working with NOAA on hazard assessment at the 106-Mile Site. When will the results of your study become available? Will they be available in time to make a decision regarding the designation of the 106-Mile Site?

Answer. EPA and NOAA have worked together to provide information for use in making a decision regarding the designation. Outputs will include:

Summary of Physical Oceanography (NOAA technical Memoranda NMFS-F/NEL 17); available now.

106-Mile Waste Disposal Characterization Update Report; currently being reviewed, final draft due in June 1983.

J. F. Paul et al. Application of a Hazardous Assessment Research Strategy for Waste Disposal at Deepwater Dumpsite 106; symposium manuscript completed and in usable form now, final publication in about a year.

These items are/will be available in time to make a decision regarding the designation of the 106-Mile Site.

THE PORT AUTHORITY OF NY & NJ*Electronics*One World Trade Center
New York, N.Y. 10048Port Department
Anthony J. Tozzoli, Director
Tel. 212-512-4153
Telex 270-000-1000

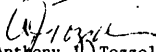
March 22, 1983

Hon. John B. Breaux
Chairman, Subcommittee on Fisheries,
Wildlife Conservation and the
Environment
U.S. House of Representatives
Washington, DC 20515

Dear Chairman Breaux:

The Port Authority of New York and New Jersey has reviewed the statement of the American Association of Port Authorities concerning the proposed "Ocean Dumping Amendments Act of 1983" (H.R. 1761) as presented before your Subcommittee on March 15. As a port virtually totally dependent upon the ocean disposal of dredged material, we are supportive of the AAPA position. We would ask that this support be made a matter of record.

Sincerely,


 Anthony J. Tozzoli
 Director, Port Department

cc: Hon. Mario Biaggi
 Hon. William Carney
 Hon. Edwin B. Forsythe
 Hon. William J. Hughes
 Hon. Norman F. Lent



NATIONAL FISHERIES INSTITUTE, INC.

1101 CONNECTICUT AVENUE N.W. ■ WASHINGTON D.C. 20036 ■ (202) 857-1110

April 7, 1983

The Honorable Norman E. D'Amours
Chairman
Subcommittee on Oceanography
H2-541 House Office Building Annex II
Washington, DC 20515

Dear Mr. Chairman:

Thank you for your letter of April 5, 1983, seeking our comments on H.R. 2062. We appreciate your efforts to improve the marine sanctuary program. Your bill, however, does not fully address our basic concerns.

The marine sanctuary program continues to generate a very strong adverse reaction in the fishing industry. One of the reasons, I think, is that the proposed sanctuary designations do not make clear exactly what fishing regulations will apply in the proposed sanctuary. Instead, regulations come after the designation. When a proposed sanctuary covers a prime fishing area, as they often do, it is easy to imagine the worst case. The result is a strong outcry.

A second reason for the adverse reaction to the program is a concern that fishing would be managed by a federal office in Washington, D.C., rather than the Regional Fishery Management Councils. Fisheries are best managed at the regional level with management measures that can be adjusted quickly when events change. We have struggled the past few years with regulatory red tape, and don't want to add another bureaucratic layer to an already overburdened process.

My specific suggestions are to amend your bill to:

- (1) require that any proposed regulations impacting the fishing industry be identified at the time of the proposed sanctuary designation so that the industry knows the impact of a proposed designation;
- (2) provide that any federal regulation of fishing in sanctuaries be developed and implemented solely under the Magnuson Fishery Conservation and Management Act. Under this Act, regulations must be consistent with "other applicable law" which could include marine sanctuary designations; and

- (3) insure that there is adequate Congressional oversight of the program so it is not used to impose unnecessary burdens on the fishing industry.

I hope these suggestions are helpful.

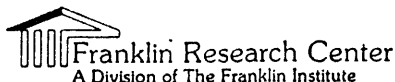
Sincerely,

A handwritten signature in dark ink, appearing to read "Dick Cutting", written in a cursive style.

Richard E. Cutting, Jr.
Vice President - Government Relations

REG/sb

cc: Fisheries Subcommittee
Oceanography Subcommittee



March 14, 1983

Mr. Darrell Brown
Staff of Congressman Norman E. D'Amours
House of Representatives
Subcommittee on Oceanography and
The Subcommittee on Fisheries and Wildlife
Conservation and the Environment of the
Committee on Merchant Marine and Fisheries
Longworth House Office Building
Washington, D. C.

Dear Mr. Brown:

A review of progress at the Philadelphia ECOROCK demonstration plant is herewith submitted.

Construction work on the demonstration plant was completed in June 1982. Additional start-up crew members were hired and trained immediately. Since July a total of ten test and production runs have been made. The first five concentrated on utilizing only incinerator residue as feed material (i.e. no sewage sludge was fed). Good quality rock product was made from the start. Minimal problems with plant equipment, procedures and personnel were encountered. Sludge was successfully introduced in November 1982. High rates of sludge feed up to the design rate of 20 tons per day of sludge solids and high ratios of sludge to incinerator residue were achieved. Good quality rock product continued to be produced. No smoke or odor problems were experienced, in spite of the fact that moisture content of the sludge varied considerably from hour to hour and that the sludge moisture content was at the highest level for which the plant was designed.

The massive amount of other construction activity at the treatment plant, some \$300 million worth, continued to interfere with operation of the ECOROCK facility. This eventually required a 2 month shut-down of the demonstration plant, while an alternative method and source of sludge feed could be developed.

The City of Philadelphia appears pleased with the start-up and confident over the results. They have taken action to extend the start-up contract to an operating contract. In addition, they have requested that a design memorandum (i.e. plan) be drawn covering a 30 fold scale-up of this plant to handle 600 dry tons of sludge solids per day. Trash will be used as the fuel for the scaled-up plant.

Very truly yours,

D. Pindzola
Principal Engineer
Telephone: 215 448-1305

DP/cm

REAUTHORIZATIONS AND OVERSIGHT OF THE NATIONAL OCEAN POLLUTION PLANNING ACT AND TITLE II

MONDAY, APRIL 25, 1983

HOUSE OF REPRESENTATIVES, SUBCOMMITTEE ON OCEANOGRAPHY AND SUBCOMMITTEE ON FISHERIES AND WILDLIFE CONSERVATION AND THE ENVIRONMENT, COMMITTEE ON MERCHANT MARINE AND FISHERIES,

Washington, D.C.

The subcommittees met, pursuant to call, at 10:05 a.m., in room 1334, Longworth House Office Building, Hon. Norman E. D'Amours (chairman of the Subcommittee on Oceanography) presiding.

Present: Representatives D'Amours, Hughes, Hutto, Sunia, Forsythe, and Sawyer.

Staff present: Howard Gaines, Darrell Brown, Mary Pat Barrett, Craig Zamuda, Tom Kitsos, Margaret O'Bryon, George Pence, Barbara Wyman, and Bob Deibel.

Mr. D'AMOURS. The subcommittees will come to order.

This joint hearing of the Subcommittee on Oceanography and the Subcommittee on Fisheries and Wildlife Conservation and the Environment will hear testimony this morning on two bills reauthorizing programs dealing with marine pollution research. The first of these, H.R. 1546, reauthorizes the National Ocean Pollution Planning Act, an act whose function it is to oversee all ocean and Great Lakes pollution research conducted by Federal agencies, identify duplication, fill gaps and make recommendations concerning our future research mission.

The second, H.R. 1547, reauthorizes title II of the Marine Protection, Research and Sanctuaries Act. It is this title which directs NOAA and EPA to conduct research and studies relating to ocean dumping.

For the third consecutive year, the submitted administration budget includes heavy cuts in the Federal marine research effort. This is especially troubling when we remember that this very same administration has testified before these subcommittees about the likelihood of significantly increased ocean dumping in coming years.

Now, more than ever, we need reliable information about the impacts of our actions on the ocean environment. What we get instead are proposals to terminate regional pollution projects, terminate development of marine pollution measurement techniques, terminate sea-grant-conducted pollution research, terminate Northeast monitoring, and terminate Great Lakes pollution research.

It is my strong recommendation to the members of these subcommittees that we continue to insist on adequate funding for marine pollution research.

[The bills and a departmental report follow:]

98TH CONGRESS
1ST SESSION

H. R. 1546

To amend the National Ocean Pollution Planning Act of 1978 to authorize appropriations for such Act for fiscal years 1984 and 1985.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 17, 1983

Mr. SCHEUER introduced the following bill; which was referred jointly to the Committees on Merchant Marine and Fisheries and Science and Technology

A BILL

To amend the National Ocean Pollution Planning Act of 1978 to authorize appropriations for such Act for fiscal years 1984 and 1985.

- 1 *Be it enacted by the Senate and House of Representa-*
- 2 *tives of the United States of America in Congress assembled,*
- 3 That section 10 of the National Ocean Pollution Planning
- 4 Act of 1978, as amended (33 U.S.C. 1709), is amended—
- 5 (1) by striking out “and” after “1981,” and
- 6 (2) by striking out “1982.” and inserting in lieu
- 7 thereof “1982, and not to exceed \$3,000,000 for each
- 8 of the fiscal years 1984 and 1985.”.

98TH CONGRESS
1ST SESSION

H. R. 1547

To amend the Marine Protection, Research, and Sanctuaries Act of 1972 to authorize appropriations for such Act for fiscal years 1984 and 1985, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 17, 1983

Mr. SCHEUER introduced the following bill; which was referred jointly to the Committees on Merchant Marine and Fisheries and Science and Technology

A BILL

To amend the Marine Protection, Research, and Sanctuaries Act of 1972 to authorize appropriations for such Act for fiscal years 1984 and 1985, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That section 201 of the Marine Protection, Research, and
4 Sanctuaries Act of 1972 (33 U.S.C. 1441) is amended by
5 striking out all that follows "connecting waters" and insert-
6 ing in lieu thereof a period.

7 SEC. 2. Section 202 of the Marine Protection, Re-
8 search, and Sanctuaries Act of 1972 (33 U.S.C. 1442) is
9 amended—

2

1 (1) by inserting “(1)” before “The Secretary” in
2 subsection (a);

3 (2) by striking out “in consultation” in the first
4 sentence of subsection (a) and inserting in lieu thereof
5 “in close consultation”;

6 (3) by adding at the end of subsection (a) the fol-
7 lowing new paragraph:

8 “(2) The Secretary shall ensure that the program under
9 this section complements, when appropriate, the activities
10 undertaken pursuant to title I. Such program shall include
11 but not be limited to—

12 “(A) the development and assessment of scientific
13 techniques to define and quantify the degradation of
14 the marine environment;

15 “(B) the assessment of the ability of the marine
16 environment to assimilate materials without degrada-
17 tion;

18 “(C) continuing monitoring programs to assess the
19 health of the marine environment, including but not
20 limited to the monitoring of bottom oxygen concentra-
21 tions, contaminant levels in biota, sediments, and the
22 water column, diseases in fish and shellfish, and
23 changes in types and abundance of indicator species;
24 and

1 “(D) the development of methodologies, tech-
2 niques, and equipment for disposal of waste materials
3 to minimize degradation of the marine environment.”;
4 and

5 (4) by striking out subsection (c) and redesignating
6 subsections (d) and (e) as subsections (c) and (d), re-
7 spectively.

8 SEC. 3. Section 203 of the Marine Protection, Re-
9 search, and Sanctuaries Act of 1972 (33 U.S.C. 1443) is
10 amended by adding at the end thereof the following new sub-
11 sections:

12 “(c) The Administrator, in cooperation with the Secre-
13 tary, the Secretary of Commerce, and other officials of appro-
14 priate Federal, State, and local agencies, shall assess the
15 feasibility of regional management plans for the disposal of
16 waste materials. Such plans should integrate where appropri-
17 ate Federal, State, regional, and local waste disposal activi-
18 ties into a comprehensive regional disposal strategy. These
19 plans should address, among other things—

20 “(1) the sources, quantities, and types of materials
21 that require and will require disposal;

22 “(2) the environmental, economic, social, and
23 human health factors associated with disposal alterna-
24 tives;

1 “(3) the improvements in production processes,
2 methods of disposal, and recycling to reduce the ad-
3 verse effects associated with such disposal alternatives;

4 “(4) the applicable laws governing waste disposal;
5 and

6 “(5) improvements in permitting processes to
7 reduce administrative burdens.

8 “(d) The Administrator, in cooperation with the Admin-
9 istrator of the National Oceanic and Atmospheric Adminis-
10 tration, shall submit to the Congress and the President, not
11 later than one year after the date of enactment of this provi-
12 sion, a report on sewage sludge disposal in the New York
13 region. The report shall consider the factors listed in subsec-
14 tion (c) as they relate to landfilling, incineration, and ocean
15 dumping; shall include a cost-benefit comparison of these
16 three alternatives; and shall recommend such regulatory or
17 legislative changes as may be necessary to reduce the ad-
18 verse impacts associated with sewage sludge disposal.”.

19 SEC. 4. Section 204 of the Marine Protection, Re-
20 search, and Sanctuaries Act of 1972 (33 U.S.C. 1444) is
21 redesignated as section 205; and such section as so redesign-
22 ated is amended by striking out “and” immediately follow-
23 ing “fiscal year 1981,” and by striking out “fiscal year
24 1982.” and inserting in lieu thereof the following: “fiscal
25 year 1982, and not to exceed \$12,000,000 for each of the

1 fiscal years 1984 and 1985. Of these funds, at least
2 \$500,000 shall be made available in each of the fiscal years
3 1984 and 1985 to carry out the studies authorized in section
4 203 of this Act.”.

5 SEC. 5. Section 205 of the Marine Protection, Re-
6 search, and Sanctuaries Act of 1972 (33 U.S.C. 1445) is
7 transferred to a point immediately following section 203 of
8 such Act and redesignated as section 204; and such section
9 as so transferred and redesignated is amended to read as
10 follows:

11 “SEC. 204. (a) In March of each year, the Secretary of
12 Commerce shall report to the Congress on his activities
13 under this title during the previous fiscal year. The report
14 shall include—

15 “(1) the Secretary’s findings made under section
16 201, including an evaluation of the short-term ecologi-
17 cal effects and the social and economic factors involved
18 with the dumping involved;

19 “(2) the results of activities undertaken pursuant
20 to section 202;

21 “(3) with the concurrence of the Administrator
22 and after consulting with other appropriate Federal
23 agencies, an identification of the short- and long-term
24 research requirements associated with activities under

1 title I, and a description of how Federal research under
2 titles I and II will meet those requirements; and

3 “(4) activities of the Department of Commerce
4 under section 5 of the Act of March 10, 1934 (48 Stat.
5 401; 16 U.S.C. 665).

6 “(b) In March of each year, the Administrator shall
7 report to the Congress on his activities during the previous
8 fiscal year under section 203 of the Marine Protection, Re-
9 search, and Sanctuaries Act of 1972 (33 U.S.C. 1443).”.



GENERAL COUNSEL OF THE
UNITED STATES DEPARTMENT OF COMMERCE
Washington, D.C. 20230

May 2, 1983

Honorable Walter B. Jones
Chairman
Committee on Merchant Marine
and Fisheries
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Jones:

The Secretary has asked me to respond to your letter requesting our views on H.R. 1546, a bill

"To amend the National Ocean Pollution Planning Act of 1978 to authorize appropriations for such Act for fiscal years 1984 and 1985",

and H.R. 1547, a bill

"To amend the Marine Protection, Research, and Sanctuaries Act of 1972 to authorize appropriations for such Act for fiscal years 1984 and 1985, and for other purposes."

On April 25, 1983, Mr. Matuzeski of NOAA testified before the Subcommittee on Oceanography of the House Committee on Merchant Marine and Fisheries that the Administration supports H.R. 1546 and opposes H.R. 1547. I have enclosed a copy of his testimony.

Sincerely,

Sherman E. Under
Sherman E. Under
General Counsel

Enclosure

[Committee Note: The statement may be found on p. —.]

Mr. D'AMOURS. Our witnesses today are Mr. William Matuszeski, Acting Deputy Assistant Administrator for the National Ocean Service of the National Oceanic and Atmospheric Administration, accompanied by Mr. Andrew Robertson, Director of the National Marine Pollution Program Office. Also with us today is Mr. Eric Eidsness, Assistant Administrator for Water, Environmental Protection Agency. I look forward to your testimony. I ask you to approach the table. Prior to that, while that is happening rather, I will ask Mr. Forsythe, my good friend, and the ranking minority member of the full committee, for an opening statement.

Mr. FORSYTHE. Thank you, Mr. Chairman.

I am pleased to participate in today's hearings on two bills which reauthorize important ocean pollution research programs—title II of the Marine Protection, Research, and Sanctuaries Act, and the National Ocean Pollution Planning Act. I am especially interested in hearing from today's witnesses on progress made during the past year on ocean pollution research and monitoring efforts related to pending management decisions affecting the New York Bight.

I join my colleague, Mr. D'Amours, in expressing concern about the administration's fiscal year 1984 budget recommendations for ocean pollution research programs. Elimination of NOAA's ocean waste disposal research programs—including the regional projects in the New York Bight and the Hudson-Raritan Estuary, and the Northeast monitoring program—just doesn't make sense. These cuts come at the same time we are told that outstanding gaps in knowledge exist on the effects of pollutants on human health and the ocean environment. They also come at the same time we are facing the prospect of increased ocean dumping in the years to come. In my mind, the work accomplished as part of the ocean pollution research programs is of national significance, and far exceeds the responsibility, or financial capability, of our States and local communities.

This issue of ocean pollution is one of the toughest which we on the committee face. I welcome the witnesses before us today and look forward to their testimony.

Mr. D'AMOURS. I thank you, Mr. Forsythe, for your thoughtful statement.

Now we will proceed with the testimony, and, Mr. Matuszeski, would you lead off, please.

STATEMENT OF WILLIAM MATUSZESKI, DEPUTY ASSISTANT ADMINISTRATOR FOR NATIONAL OCEAN SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE, ACCOMPANIED BY ANDREW ROBERTSON, DIRECTOR, NATIONAL MARINE POLLUTION PROGRAM OFFICE, AND CHARLES EHLE, ACTING CHIEF, OCEAN ASSESSMENTS DIVISION, OFFICE OF OCEANOGRAPHY AND MARINE SERVICES, NATIONAL OCEAN SERVICE

Mr. MATUSZESKI. I am joined today by Dr. Andy Robertson, the Director of the National Marine Pollution Program Office, to my left, and by Bud Ehler, Director of our Ocean Assessments Division of the National Ocean Service. I would like to summarize my statement briefly and submit the entire statement for the record.

Mr. D'AMOURS. Without objection, the full statement will appear in the record as submitted. We would appreciate your summarizing it.

Mr. MATUSZESKI. Mr. Chairman and members of the committee, I am pleased to be here today to present the agency's views on H.R. 1547, a bill to reauthorize and amend title II of the Marine Protection, Research, and Sanctuaries Act (MPRSA), and H.R. 1546, a bill to reauthorize and amend the National Ocean Pollution Planning Act (NOPPA).

Turning first to the Marine Protection, Research, and Sanctuaries Act, section 201 assigns responsibilities to the Department of Commerce for a continued monitoring and research paragraph on the effects of dumping material into ocean waters, coastal waters, and the Great Lakes. Section 202 establishes a comprehensive program of research on long-range effects of pollution, over fishing and other anthropogenic changes in ocean ecosystems.

NOAA activities under section 201 and section 202 are augmented by a financial assistance program under section 6 of the National Ocean Pollution Planning Act. NOAA has now combined these three separate programs into a single coordinated effort. The goal of this NOAA program is to provide the best available scientific and technical information on marine environmental quality to policymakers in Congress, other Federal agencies, State and local governments, industry, and the public.

Management responsibility for NOAA's marine environmental quality program lies with the Ocean Assessments Division in our Office of Oceanography and Marine Services within the National Ocean Service.

Mr. Chairman, I believe it is worth pointing out that as a result of the recent reorganization within NOAA, we have been able to bring together in one place research efforts that were previously located in various parts of the agency. The section 201, section 202, section 6 programs, and the regional programs have been placed within NOS from the research and development office of the agency. The Northeast monitoring program has been brought from the National Ocean Survey into NOS. The ocean resources coordination and assessment program has been added from the Office of Coastal Zone Management and the National Marine Pollution Program Office has been moved from the Office of the Administrator. We now have in one organizational unit all of these functions working together for the first time.

We also have physical colocation for the first time, something that is difficult to achieve in this metropolitan area, as you are well aware.

In fiscal 1984 we plan to increase our focus on national problems, anticipating that all coastal areas of the United States will be affected by proposals to use the ocean for waste disposal in the near future. We will place a high priority on quality assurance and interregional comparability and on the assessment of long-term trends in marine environmental quality, particularly in areas which are already highly stressed.

The budget request for these assessments and research programs in fiscal year 1984 is \$6.4 million, of which \$1.6 million is for section 6 of NOPPA, and \$4.8 million for section 202.

We are reviewing our marine pollution programs in order to determine how information necessary for marine pollution management decisions can be obtained in a more cost-effective manner. We will synthesize this knowledge to assist us in our future research.

We request that section 202 of the Marine Pollution Research and Sanctuaries Act be reauthorized at the level of \$4.8 million for fiscal year 1984, and such sums as necessary for fiscal year 1985.

We oppose enactment of H.R. 1547. We believe that existing provisions of the statute are sufficient to carry out the intentions of that new proposal. NOAA is already carrying out with EPA much of the intent of H.R. 1547. We are defining and quantifying degradation of the marine environment. We are evaluating techniques for disposal of waste materials in the ocean, and working with EPA to determine the feasibility of a comprehensive multimedia management approach for the disposal of wastes in oceans and coastal areas.

I would now like to turn to the National Ocean Pollution Planning Act. The National Marine Pollution Program Office estimate that Federal expenditures in the area of marine pollution assessment will be approximately \$130 million for fiscal year 1983. This involves work with 11 Federal departments and agencies. Congress enacted the National Ocean Pollution Planning Act to establish a comprehensive plan to improve the coordination of these programs.

Section 4 of the statute requires the preparation of this comprehensive 5-year plan. The original requirement was that the plan be revised every 2 years. This was recently changed to 3 years, and the office within the National Ocean Service is preparing and coordinating the implementation of the plan.

Section 5 requires NOAA to establish a comprehensive ocean pollution research, development, and monitoring program which, as I have indicated, we have already accomplished.

Section 6 provides financial assistance for researchers to investigate priority areas not adequately addressed by other Federal programs. The Ocean Assessments Division of NOS is responsible for implementing both sections 5 and 6.

Section 8 deals with the public availability of findings and information. This function is administered by our National Oceanographic Data Center.

The original plan was completed in 1979 and a revised plan was released in 1982. The third plan is now due to Congress in September of 1985, and current plans are to beat that date by several months.

A number of efforts are now underway to implement the recommendations presented in the second national marine pollution program plan. These include an emphasis on hydrocarbon development on the OCS, and its long-term chronic effects. It includes the development of a multiagency strategy for conducting research on ocean dumping of sewage sludge and dredged material which EPA has underway, and the report also emphasizes the need to look at the impacts of coal conversion on the potential issues of disposal of such waste.

Finally, NMPPO is supporting efforts to improve coordination of quality assurance in measuring chemical constituents.

Mr. Chairman, the administration supports H.R. 1546, which reauthorizes the National Ocean Pollution Planning Act through 1985 at a level of \$3 million.

Mr. Chairman, this completes the summary of my statement. I would be pleased to respond to questions.

[The statement of Mr. Matuszeski follows:]

PREPARED STATEMENT OF WILLIAM MATUSZESKI, DEPUTY ASSISTANT ADMINISTRATOR FOR NATIONAL OCEAN SERVICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE

Mr. Chairman and members of the subcommittee, I am pleased to be here today to testify on H.R. 1547, a bill to reauthorize and amend Title II of the Marine Protection, Research, and Sanctuaries Act (MPRSA), and H.R. 1546, a bill to reauthorize and amend the National Ocean Pollution Planning Act (NOPPA). NOAA supports reauthorization of both Title II of the MPRSA at a level of \$4.8 million and the NOPPA at a level of \$3.0 million.

MARINE PROTECTION, RESEARCH, AND SANCTUARIES ACT

I would like to summarize the results of the National Oceanic and Atmospheric Administration's (NOAA) monitoring and research efforts in fiscal years 1982 and 1983 under Title II of the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972 (Public Law 92-532). Section 201 of Title II assigns responsibility to the Department of Commerce for continued monitoring and research on the effects of dumping material into ocean waters, coastal waters and the Great Lakes. Section 202 of Title II directs the Secretary of Commerce, in consultation with other agencies, to initiate a comprehensive program of research on long-range effects of pollution, overfishing and other anthropogenic changes in ocean ecosystems.

NOAA activities under Section 201 and Section 202 of MPRSA are augmented by financial assistance authorized under section 6 of the National Ocean Pollution Planning Act (P.L. 95-273). In 1982 and 1983, NOAA combined these three separate programs into a single coordinated effort pursuant to Section 5 of the National Ocean Pollution Planning Act. I will discuss this program as a unit and document the allocation of funds within it.

The goal of this NOAA program is to provide the best available scientific and technical information on marine environmental quality to policy-makers in Congress, other Federal agencies, state and local governments, industry and the public in order to support management decisions that will facilitate balanced use of the Nation's coastal waters and oceans.

Under Section 202, NOAA seeks to:

- Quantify the sources, discharges, transport and transformation of contaminants associated with coastal and ocean waste disposal;

- Identify and quantify the short and long-term effects on resources of contaminants and environmental changes associated with ocean waste disposal practices;

- Develop, test, and apply new methods for evaluating and projecting short and long-range effects of national policies on coastal and ocean waste disposal;

- Conduct studies in representative coastal regions and estuaries to develop improved methods for assessing the effects of human activities in such areas throughout the Nation;

- Measure indicators of environmental quality and assess long-term trends in the status of the Nation's coastal waters and estuaries; and

- Ensure the quality and inter-regional comparability of marine environmental quality measurements.

NOAA accomplishes these goals by managing and sponsoring research performed by scientists and engineers from NOAA laboratories, other Federal agencies, state and local governments, industry, and academic and research institutions. Management responsibility for NOAA's marine environmental quality program lies with the Ocean Assessments Division, Office of Oceanography and Marine Services, National Ocean Service.

Fiscal year 1983 program

In fiscal year 1983 the program is focusing on (1) contaminant distribution and related biological response in selected coastal regions such as the heavily used Hudson-Raritan estuary and Puget Sound, a recently abandoned sewage-sludge dump-site off the Mid-Atlantic Coast, and deep ocean dump sites; and (2) compara-

tive studies of dispersion from coastal outfalls versus barge dumping in Puerto Rico (pharmaceutical wastes) and Southern California (sewage sludge). We will complete these projects during fiscal year 1983.

Fiscal year 1984 program

In fiscal year 1984, we plan to increase our focus on national problems since we anticipate that all coastal areas of the U.S., rather than just the Northeast, will propose the use of the ocean for waste disposal. We will place a high priority on quality assurance and inter-regional comparability of marine environmental quality data. NOAA will continue its efforts to assess long-term trends in marine environmental quality, particularly in these areas which are already highly stressed.

The budget request for these assessments and research programs in fiscal year 1984 is \$6.4 million, of which about \$1.6 million is for Section 6 of Public Law 95-273 and about \$4.8 million is for Section 202 of Title II.

We are reviewing our marine pollution programs to determine how information necessary for marine pollution management decisions can be developed in a more cost-effective manner. Considerable site-specific research, under Section 201, has either already been completed or will be completed in fiscal year 1983. We will synthesize this knowledge to assist us in our future research efforts under Section 202.

In order to continue these important efforts, we request that Section 202 of the Marine Protection, Research and Sanctuaries Act be reauthorized at a level of \$4.8 million for fiscal year 1984 and such sums as necessary for fiscal year 1985.

Adequacy of present act

We oppose enactment of H.R. 1547. We believe that the existing provisions of the Marine Protection, Research and Sanctuaries Act, be amended, are sufficient to address concerns associated with national ocean pollution issues, including ocean waste disposal. NOAA is already carrying out much of the intent of H.R. 1547. We are developing and assessing scientific techniques to define and quantify degradation of the marine environment. We are assessing the ability of the marine environment to assimilate materials without degradation. We are continuing to monitor and assess the health of the marine environment. And we are developing methodologies to assess techniques for disposal of waste materials that minimize environment degradation. Finally, we have worked with the U.S. Environmental Protection Agency to determine the feasibility of comprehensive, multi-media management plans for the disposal of waste material in coastal areas throughout the Nation.

NATIONAL OCEAN POLLUTION PLANNING ACT

Ocean pollution research, development and monitoring programs conducted and supported by the Federal government are expensive. The National Marine Pollution Program Office (NMPPPO) estimates Federal expenditures of about \$150M for FY 1981, \$140M for FY 1982, and \$130M for FY 1983. These programs are conducted or supported by eleven Federal departments and agencies. The Congress enacted the National Ocean Pollution Planning Act, Public Law 95-273, and subsequent amendments, Public Law 96-17 and Public Law 96-255, based on the need for a comprehensive plan to improve the coordination of these programs.

The National Ocean Pollution Planning Act directs NOAA to undertake the following activities to develop a concerted Federal ocean pollution research effort.

Section 4 requires the preparation of a comprehensive five-year plan to guide the overall Federal effort in ocean pollution research, development and monitoring. The plan is to contain an assessment and ordering of national needs and problems, a list of related federal programs with an analysis of each program's contribution to plan priorities, and policy recommendations to guide Federal research. The original requirement that the plan be revised every two years was recently changed to every three years by the 1982 Congressional Reports Elimination Act (Public Law 97-275). The National Marine Pollution Program Office within the National Ocean Service prepares and coordinates implementation of the plan.

Section 5 requires NOAA to establish a comprehensive ocean pollution research, development and monitoring program consistent with the priorities established by the plan and to include projects for which NOAA has responsibility pursuant to Title II of the Marine Protection, Research, and Sanctuaries Act.

Section 6 stipulates the establishment of a program of financial assistance for researchers to investigate areas identified as priority research, development and monitoring needs in the 5-year plan not adequately addressed by other Federal programs. The Ocean Assessments Division of the National Ocean Service's Office of Oceanog-

raphy and Marine Services is responsible for implementing Sections 5 and 6 of the statute.

Section 8 assigns NOAA the responsibility to disseminate findings and information generated by these programs to Federal agencies and to the general public. This function is administered by the National Oceanographic Data Center of NOAA's National Environmental Satellite, Data and Information Service.

Now I would like to discuss some specific accomplishments and list activities to be undertaken during the reauthorization period.

As required by Section 4 of the National Ocean Pollution Planning Act, the first Federal Plan for Ocean Pollution Research, Development, and Monitoring was published in 1979. A revised and expanded version of the plan was released in 1982, and the third plan is due to Congress in September of 1985. Plan appendices have been published which detail the accomplishments of Federal ocean pollution research programs and describe approximately 1,000 Federal projects.

Planning and implementation efforts involve senior representatives of eleven Federal departments and agencies conducting and supporting research, the Office of Management and Budget, and the Executive Office of Science and Technology Policy. An interagency committee has been chartered under the Office of the President's Science Adviser to guide the planning effort. The Interagency Committee on Ocean Pollution Research, Development and Monitoring (COPRDM) is chaired by NOAA's Deputy Administrator and operates under the Federal Coordinating Council for Science, Engineering and Technology.

A number of efforts are now underway to implement the recommendations presented in the second National Marine Pollution Program Plan. These efforts focus on Outer Continental Shelf (OCS) environmental studies, waste disposal research, marine pollution implications of increased coal use and general program support.

The second National Plan recommended that Federal research related to hydrocarbon development on the OCS be directed to investigating the long-term low-level effects of such development. DOI's Minerals Management Service currently chairs an interagency subcommittee developed to assist COPRDM in evaluating the need for the program and determining the best way to conduct it.

Based on a recommendation contained in the second National Plan, the NMPPO and EPA are developing a multi-agency strategy for conducting research on ocean dumping of sewage sludge and dredged material. EPA is now preparing an ocean dumping research program plan that will be the basis for a Federal research strategy.

The Second National Plan identifies the increasing emphasis on coal for combustion and export as an emerging issue. NMPPO is now completing an in-house study which evaluates the likelihood of substantial increases in domestic combustion and export of coal by the end of the century, and reviews research related to disposal of coal combustion wastes and dredged material produced by port development.

NMPPO is supporting efforts to improve coordination of quality assurance in measuring chemical constituents in the marine environment. A working group has been established with representation from seven Federal agencies that support pollution research, as well as the National Bureau of Standards, to prepare a multi-agency overview of existing quality assurance methods.

Section 5 of the Act directs NOAA to establish a comprehensive ocean pollution research, development and monitoring program. We are in fact developing a national perspective on marine pollution in order to guide policy decisions, provide a basis for national research and evaluate pollution trends. The NOAA program is conducted in accordance with the National Marine Pollution Program Plan.

To fulfill the requirements of Section 8, NOAA's National Oceanographic Data Center is developing a comprehensive information-dissemination system. It will establish a network of coordination and referral areas with a central office in Washington, which will be fully operational by 1985. This Ocean Pollution Data Information Network (OPDIN) will improve the acquisition and facilitate timely dissemination of marine pollution data among Federal agencies and to state and local governments and the private sector.

The Administration supports H.R. 1546, which reauthorizes the National Ocean Pollution Planning Act through fiscal year 1985 at a level of \$3 million.

I can assure you of our intention to fulfill the congressional mandate for the National Ocean Pollution Planning Act and Title II of the Marine Protection, Research, and Sanctuaries Act. We hope to continue to improve Federal coordination in the area of marine pollution research, and will focus on developing national plans for research to address the nation's most pressing marine pollution problems.

Mr. Chairman, this completes my statement. I would be pleased to respond to any questions you or the other Members may have.

Mr. D'AMOURS. Thank you.

Before getting to the questions, we will hear from EPA. Therefore, Mr. Eidsness, would you proceed.

STATEMENT OF FREDERIC A. EIDSNESS, JR., ASSISTANT ADMINISTRATOR FOR WATER, U.S. ENVIRONMENTAL PROTECTION AGENCY, ACCOMPANIED BY TUDOR DAVIES, POLICY CHIEF ON STAFF, OFFICE OF WATER, AND RICHARD CASPE, CHIEF, TECHNICAL BRANCH, REGION II

Mr. EIDSNESS. Thank you, Mr. Chairman and members of the subcommittee. I am pleased to be with you here today to present the agency's views on H.R. 1547, a bill to amend title II of the Marine Protection Research and Sanctuaries Act.

I have with me today Dr. Tudor Davies, who is now Policy Chief on my staff at EPA, in the Office of Water. Dr. Davies most recently came from the Narragansett ERL, where he was director of that facility. Mr. Richard Caspe, Chief of the Technical Resources Branch, region II of EPA is with us today.

Under title II of the act, the National Oceanic and Atmospheric Administration has undertaken a comprehensive program of monitoring and research on the effects of dumping wastes into ocean waters, as well as the long-range effects of pollution on ocean ecosystems. These research projects support the Environmental Protection Agency's ongoing ocean dumping program activities under title I of the MPRSA.

Section 2 of H.R. 1547 would amend title II to require specific research activities that are already within the general mandate of NOAA. We believe that the language of this provision is unnecessary since the existing statute authorizes a broad base of research and development activities to complement title I.

Many of the suggested projects in the bill are currently underway and several will be completed in fiscal year 1983. EPA has entered into collaborative research agreements with NOAA. In recognition of different types of expertise, the agencies are attempting to gain optimal use of resources. For example, we are working with NOAA on hazard assessment at the 106-mile site in the New York region, and we have undertaken a joint project to obtain scientific information on recovery of the Philadelphia sludge dumpsite where municipal sludge dumping has ended.

EPA has established a close working relationship with NOAA in the conduct of studies assessing the hazard of ocean disposal of waste materials. In 1981 an interagency agreement was established between NOAA's National Marine Fisheries Service [NMFS] and EPA's Environmental Research Laboratory, Narragansett [ERL-N] to implement a joint data management system for the storing, analysis and sharing of physical, chemical, and biological data collected by individual and joint research projects.

In 1982 another interagency agreement was established between NMFS and ERL-N as the basis for a cooperative research program to conduct specific studies for the characterization of ocean disposal sites. This joint activity has produced two important documents thus far, "A Summary of the Physical Oceanographic Processes and Features Pertinent to Pollution Distribution in the Coastal and

Offshore Waters of the Northeastern United States"; and "The Site Characterization Update for 106-mile Ocean Disposal Site."

In order to facilitate these joint activities and to better coordinate individual agency projects, EPA and NOAA established in 1982 the "Ocean Disposal Research Steering Committee." This committee is made up of representatives from EPA, NOAA [NMFS], NOAA National Ocean Services and includes observers from the U.S. Army Corps of Engineers. The committee meets bimonthly and has provided an excellent forum for reviewing, coordinating, conducting, and monitoring ocean dumping research activities.

This committee provided input and collaborated on an EPA-sponsored workshop to develop a scientific protocol for the designation of ocean disposal sites which was held in February of this year.

These studies will improve our abilities to assess the impacts of ocean dumping on the marine environment, assimilative capacity, and short- and long-term monitoring approaches.

Section 3 of H.R. 1547 would amend title II of the MPRSA to require EPA, in cooperation with the Department of Commerce, to assess the feasibility of regional management plans for the disposal of waste materials. These management plans would integrate Federal, State, regional, and local disposal activities into a comprehensive regional disposal strategy. This section is not needed.

The concept of regional water and waste management plans is a sound one and is embodied both in the Clean Water Act. (Section 295(j), section 208 and section 303) and under the Resource Conservation and Recovery Act (RCRA subtitles B and D). Such planning programs have been carried out in the New York area under the auspices of State and regional planning authorities in a process which involves public participation and EDPA review and approval of the resulting plans.

For example, under the Clean Water Act we have approved a number of section 208 plans which must be updated annually and certified by the respective State Governors. In addition, under subtitle D of the Resource Conservation and Recovery Act, we have approved 22 State plans for nonhazardous solid waste management, 5 State plans have been partially approved, and agency review is nearing completion on 18 to 20 plans.

Nonhazardous solid waste planning is underway in the New York-New Jersey metropolitan area. Under subtitle D of RCRA, EPA has made grants to New York and New Jersey totaling nearly \$3.6 million to develop statewide solid waste plans, and to inventory open dumps and for other activities, including assistance to resource recovery projects.

Under subtitle B of RCRA, EPA has provided technical assistance through a contract with Battelle Columbus Laboratories. Approximately \$150,000 in contract resources were applied to resource recovery projects, landfill remediation efforts, and local solid waste plans in the metropolitan region.

Through the President's urban policy resource recovery grants, the New York metropolitan region received nearly \$2.6 million to plan resource recovery projects. Unlike subtitles B and D grants to the States, these grants were made to municipalities and regional agencies to plan activities such as recycling and cogeneration.

The Port Authority of New York and New Jersey received the largest portion of these funds (\$942,000) for such planning. Five refuse-to-energy projects in the metropolitan region are in preliminary design, and one in Westchester County is 40 percent complete. (Approximately \$776,000 remains obligated to regional grantees, but not yet expended.)

Given the existing authority for regional waste management plans, and the fact that they are ongoing and EPA's role is clearly defined under each statute, we do coordinate these plans through our review and approval authority. However, in consideration of the underlying concerns expressed in section 3 of H.R. 1547, we will reevaluate the effectiveness of our procedures for integrating State and local plans developed under these statutes.

With respect to the section 3 suggestion for a report on sewage sludge disposal in the New York region, there are a number of ongoing planning and permitting processes that are being coordinated by the New York region which will lead to decisions on sewage disposal in the region.

For example, a section 208 water quality management plan defining goals for water quality and beneficial uses to be attained and protected for the entire New York Harbor complex was approved August 28, 1981.

Operating under the auspices of a steering committee, the regional office is coordinating the development of wasteload allocations in the New York Harbor complex from municipal and industrial sources, including consideration for impacts of continued sewage sludge dumping in the New York Bight. Membership of the steering committee consists of the States of New York and New Jersey, the Interstate Sanitation Commission, and EPA.

This effort will result in updates and amendments to these water quality management plans and decisions concerning applications for waiver of secondary treatment under section 301(h) of the Clean Water Act. We would be most happy to give the committee a status report on these ongoing planning efforts.

With regard to the generic study of sludge, the agency has established a sludge task force. The task force is charged with examining public health and environmental impacts, the costs, and the resource and energy conservation benefits of sludge disposal or reuse in all media, using all major conventional technologies or practices. These management options include landfilling, land application, recycle/reuse, distribution and marketing, incineration, and ocean disposal.

Based upon an analysis of environmental need, availability, cost effectiveness of technologies and practices, and existing Federal or State regulatory programs, the task force will fashion guidance on management approaches. The results of these efforts will serve as guidance for waste disposers on disposal alternatives.

In the New York area specifically, we are currently considering ocean dumping permit applications from several municipalities. In addition, New York City and six New Jersey sewerage authorities have petitioned EPA for a rule for the continued designation of the 12-mile sewage dump site in the New York Bight Apex. We will also determine whether to continue the designation of an alternate sewage sludge dump at the 60-mile site, and final site designation

for the 106-mile site for industrial wastes and municipal sewage sludge.

Under the MPRSA and current regulations, permit applicants must demonstrate the need to ocean dump and must produce information on health impacts, costs and potential alternatives to ocean dumping. As part of the permit process, EPA continues to evaluate technical feasibility, environmental and human health impacts, and costs of waste disposal alternatives.

In addition to our concerns that the language of this provision duplicates our existing authority, we are more concerned that, as drafted, it could limit the agency's options in evaluating waste disposal alternatives to landfilling, incineration and ocean dumping. Other viable options such as recycling and reuse, landspreading, and pretreatment of wastewater to reduce the toxic content should be tested and evaluated as waste disposal management methods.

This provision also requires a cost-benefit comparison of these three alternatives, which is inconsistent with the permit decision-making criteria under the MPRSA. EPA's mandate is to prevent or strictly limit ocean disposal so that there will be no unreasonable degradation or endangerment to human health, welfare or amenities, or the marine environment, ecological systems, or economic potentialities.

While costs and risks should be considered in determining the feasibility of alternatives, a strict requirement for cost-benefit analysis is inconsistent with the current statutory test for permitting decisions.

This concludes my prepared remarks. I will be pleased to answer any questions you may have.

Mr. FORSYTHE. Thank you, Mr. Chairman.

Mr. Eidsness, I want to follow up on this matter of guidelines and regulations. You say it is going to be this fall before you will have a working document, which would precede the ability to issue regulations as to the future of the 12-mile site, am I correct?

Mr. EIDSNESS. No, sir, not at all.

The various applicants, including the city of New York, have been working for some months, spending great sums of money, to meet the permitting requirements, including the showing of need, alternative disposal or reuse methods than disposing at the 12-mile site, which is what their request involves. But from an EPA perspective, we have not developed a complete set of usable guidance for this particular purpose, for example, which covers sludge disposal such as in the area of marketing.

We are filling that gap now. I think that the result of that effort will just make it simpler for the agency itself to go through the review of the material presented by the applicants, so that we will have an agency position on what the efficacy of sludge disposal is, considering the various alternatives.

Mr. FORSYTHE. When is that work going to be completed.

Mr. EIDSNESS. It is a guideline, a technical document, which would be available in draft form for public and peer review in the fall under our current schedule.

Mr. FORSYTHE. I still come back to the point that you will not then be prepared to rule on any existing permit applications or, as a matter of fact, any extension of the New York City permit, right?

Mr. EIDSNESS. From a timing point of view, I don't believe we have any problem, because neither the city of New York nor the New Jersey communities have completed a full application, submitted a full application to us. I believe this guidance will be very timely from the point of view of EPA's use of it for the purpose of making decisions.

Mr. FORSYTHE. What is the expiration of the current permits?

Mr. EIDSNESS. If I recall correctly, the judge has decreed that the city of New York will be allowed to continue to dispose of sewage sludge under certain circumstances at the 12-mile site until such time as a complete permit has been submitted and acted on by the EPA.

Mr. FORSYTHE. We are going round and round. The court has ruled that until the EPA is prepared to rule, they can continue, and this delay in terms of these guidelines could go on forever.

Mr. EIDSNESS. Congressman Forsythe, I don't believe that the guidelines in and of themselves represent a great breakthrough in EPA's ability to make permitting decisions, but what it does do is provide our technical people and our policy people, the regional administrator of New York, with a technical and policy position concerning the various alternative sludge disposal medium that presumably are being developed and analyzed by the city of New York as part of its permit application process.

Mr. FORSYTHE. Staff tells me that you are going to be able to move on 12-mile prior to those guidelines coming out, and you are conditioning this all upon your coming up with a plan as to how they are going to meet the——

Mr. EIDSNESS. If I could separate the two issues of a permit versus the 12-mile site redesignation, we have an independent responsibility to make a determination on the 12-mile site, independent of any permit action, and we will be doing that I hope this summer or this fall, based on information that EPA has that NOAA has developed as well in cooperation with EPA, and that is submitted by the applicants who want to use the 12-mile site.

We can conclude, and our current plan is to conclude on the disposal of the 12-mile site without acting fully on the permit applications themselves, and that is simply because of the way the statute is conducted.

We first designate the site. Then we entertain permit applications and dispose of them accordingly, so from a timing point of view there is no hook here. I can see your concern but I think we are all right.

Mr. FORSYTHE. I wish I could feel comfortable in that regard. It sounds to me like New York City at least has an awful lot of time in their hands, because they can't complete a permit application, and the court has granted them an almost open end on that. There is no calendar schedule for New York City to complete an application, is there?

Mr. EIDSNESS. I am going to have to supply for the record a response to that, because I think there are some new analyses in the court decision concerning that issue that deal with the timing, and I am sorry I don't have to have it at my fingertips.

Mr. FORSYTHE. The committee would be very, very interested in that.

My 5 minutes are up.

[The information was not received at the time of printing.]

Mr. EIDSNESS. I don't think EPA nor the city of New York can go on deciding to decide.

Mr. FORSYTHE. I would like to find someplace——

Mr. EIDSNESS. It is my position to make a decision as soon as the decision is in on the 12-mile site and we have given various jurisdictions until May 12——

Mr. FORSYTHE. Including New York?

Mr. EIDSNESS. Including New York, and then we will followon with that presumably with permit applications.

I might add, for example, if we chose not to redesignate, and I am not prejudging the outcome, then I would assume the city of New York and others would have to reconsider their application clearly.

Mr. FORSYTHE. Thank you.

Mr. D'AMOURS. Mr. Hughes, do you have any questions of the witness?

Mr. HUGHES. I defer to Mr. Sunia.

Mr. D'AMOURS. Mr. Sunia, do you have any questions?

Mr. SUNIA. No questions.

Mr. D'AMOURS. Mr. Sawyer, do you have any questions of the witness?

Mr. SAWYER. Just one, Mr. Chairman.

What is an unreasonable degradation?

Mr. EIDSNESS. There are two ways to answer. I would like to turn the question over to NOAA from the technical perspective, and then I would like to answer it for the purpose of the statutory test that incorporates that terminology.

Mr. EHLE. Congressman, from a scientific perspective, NOAA prefers the use of the term "degradation" which is a change in the state of the environment—something we can go out and measure.

The use of the term "unreasonable degradation," of course, means different things to different people, and it includes a far broader definition than simply technical and scientific information.

We are developing a set of indices with which we hope to be able to measure degradation in the marine environment. We have identified 12 such indices. We are completing initial work on one index right now, and have two others underway. However, we prefer to avoid the use of the term "unreasonable degradation."

Mr. SAWYER. As I understand the testimony that I listened to, you said that it was not a cost-benefit scheme but rather an unreasonable degradation standard, which interested me. I personally wonder why we tolerate any degradation. Maybe if I knew what you meant by unreasonable or reasonable, I would view it differently. I just don't know why degradation—does that mean a permanent degradation? That is why I don't understand what you are talking about when you say an unreasonable degradation, and I have to assume that that is your standard. You gentlemen do know what you are talking about, and that is what I would like you to enlighten me on.

Mr. EIDSNESS. If I could fill in the gap, the unreasonable degradation is of course statutory language. Clearly we are dealing here in an area of predictability, the fate and effect of pollution. No one

here at this table would deny that there is a certain amount of predictability involved concerning discussions on ocean dumping. The term "unreasonable degradation" has very significant legal statutory meaning.

The administrator, following due process publications and public comments and so forth, when he or she makes a permit decision, he or she is making a specific determination of unreasonable degradation. It is a highly site-specific type of a determination, and my understanding is that it would vary according to the type of waste that we are reviewing from a technical point of view, and it would be subjected to a considerable amount of scientific analysis as part of the normal process. But there is no finite universally acceptable definition of what is meant by unreasonable degradation, if that is what you are looking for.

Mr. SAWYER. I understand that you have to on a per-case basis make a decision based on the facts, but in the process of doing that there might be some standard you apply to those facts to determine whether it is an unreasonable degradation or not.

I don't know how you could do it on a per-case basis without having in mind what an unreasonable degradation means, to begin with.

Mr. DAVIES. If I may answer, Congressman, the Congress gave EPA a certain guidance on what should be considered unreasonable degradation. EPA then took that and interpreted that into a set of regulations, and we defined a distinct procedure for the waste and information that would be required for the site, so that we would be able to, as best we could scientifically, define the change at a site, in response to an amount of waste and the type of waste that was deposited there. We have some very rigorous conditions that we set up, which are related to things like balanced indigenous populations and change that we consider unreasonable, things like closures of fishing areas and things of that sort.

Mr. SAWYER. BOD and that sort of thing, I assume, too?

Mr. DAVIES. That is correct. We have standards for BOD which are State and federally set that when those are exceeded or we predict they will be exceeded we consider that to be unreasonable degradation.

Mr. EIDSNES. We also have a test protocol that the permit applicants must meet, a laboratory test on the wastes they are processing to discharge and also a biological analysis of the effects on biota of that waste. It is a fairly rigorous type of laboratory for the protocol in determining in the laboratory the biological impact of a particular waste, so there is a lot more to it than appears on the surface.

There is clearly no limit. There is additional work that EPA and NOAA will continue to have to do in refining the sciences as we acquire knowledge on making that technical determination.

I don't want to mislead you into thinking that we have all the procedures and protocols worked out. We clearly do not.

Mr. SAWYER. Thank you, Mr. Chairman.

Mr. D'AMOURS. I would be happy to recognize Mr. Hughes.

Mr. HUGHES. Thank you, Mr. Chairman.

Good morning.

First my colleague from Michigan, a new member of the committee, put his finger right on one of the problems, what is reasonable degradation, but unfortunately, the panel really hasn't given you the full story, because back in the mid-seventies EPA developed criteria in attempting to determine what is unreasonable degradation. This committee took the standards developed by EPA and put them in what we thought was concrete in determining that, as of December 31, 1981, there would be no further harmful ocean dumping.

The Federal District Court came along as a result of a challenge by New York City, won the case, and determined that there would be a balancing of other factors, other alternatives, including the costs of dumping in the ocean, compared to costs of other types of dumping.

EPA never appealed that decision, even to the flaw in the face of the spirit and the intent of the law that we passed in 1977, so that is why we are where we are today.

Let me just take it one step further and find out where we are along the line at this point in developing regulations to deal with the Sofar decision. I thought we were going to have that 6 months ago.

Mr. EIDSNESS. There is a regulation package to comport with the Sofar decision under development within the Agency.

Mr. HUGHES. You told me that last time you were here.

Mr. EIDSNESS. That is right, but to be very blunt, without an administrator, which as you are well aware EPA does not now have a full administrator, it is difficult to get decisions on matters of such significance as ocean dumping regulations, and I don't expect that we will get any action on this proposed regulation until we have an administrator.

Mr. HUGHES. Let me just be blunt with you. EPA has really showed no stomach whatsoever for, first of all, carrying out the intent of the law in this area, and obviously in other areas of the law. Furthermore, we have been waiting for these regulations for about 15 months, 16 months, and that is absolutely inexcusable.

Now you come in here with your testimony and the budget would suggest that at a time when you project increasing the amount of ocean dumping, you want to cut the budget for research and ongoing monitoring by 55 percent. How do you justify that?

Mr. EIDSNESS. We are not projecting an increase in ocean dumping. We are projecting a certain number of applications for ocean dumping, but let's not prejudge those until we have gone through the rule-making process on each and every one of those decisions.

Mr. HUGHES. I have to presume from some of the statements applicants and I have seen that there is going to be an increase in ocean dumping. As more waste water treatment plans come on line in the New York-New Jersey region and the sludge increases, it means the volume of sludge that is being dumped is increasing. You are not suggesting it is going to go down, are you?

Mr. EIDSNESS. Until we see the applications, until we act, I don't know, but you are right in one sense. If we remove the matter from the liquid waste it becomes sludge, and it has to go somewhere, and it is permitted one way or the other, either under the Ocean Dumping Act or under the Clean Water Act.

Mr. HUGHES. NOAA's testimony suggests that NOAA plans to focus on national problems since they anticipate that all coastal areas of the Northwest will use the ocean for waste disposal. NOAA in its testimony suggests that we anticipate more use of the ocean, not less.

What kind of data do we have now, what kind of data? Do we have sufficient base-line data right now to determine what the long-term impacts of ocean dumping are in the New York Bight area. Scientifically, do we have enough data?

Mr. MATUSZESKI. I think we have sufficient data to determine what the relative degradation might be at different sites. We are beginning to—

Mr. HUGHES. Do we understand at this point, do we have sufficient base-line data to determine what the long-term impacts of continued dumping in the New York Bight is going to do to this region?

Mr. MATUSZESKI. There are some conclusions coming out of the work thus far, but we are not in a position to make a statement definitively.

Mr. HUGHES. What we are going to do is, we are going to cut by 55 percent the amount of money going into research and monitoring. How can you possibly justify that?

Mr. MATUSZESKI. The reductions that we are taking in some cases will not affect that particular region. Some of them are in Puget Sound. Some of them are elsewhere. We will maintain our programs of assistance in those areas where we have the flexibility to put the dollars, in those regions where the problems and the issues are located. To that degree our remaining programs will be able to focus attention on areas such as the New York Bight.

Mr. HUGHES. Let me ask you a question.

Is the New York Bight unreasonably degraded?

Anybody?

Mr. EIDNESS. Congressman, if I can recall the test that I gave on March 15 of 1983, and there was a representative here from NOAA, we talked around that issue.

Mr. HUGHES. You surely did, right around the maypole, and I am trying to find out, I am still trying to find out if the New York Bight is unreasonably degraded?

My time is up, I see.

Mr. EIDNESS. From the legal point of view that decision is not made until the permit decision is made.

Mr. HUGHES. I am asking you scientifically, is the New York Bight unreasonably degraded? It has been described as the most distressed polluted body of water. It is an absolute cesspool off our coast. I am asking you scientifically, is it unreasonably degraded?

Mr. EIDNESS. The testimony given by the other gentleman, Pete Anderson from EPA in region 2, he was from EPA, he made a statement to the effect that from a scientific point of view it was degraded. Perhaps you can go back to that earlier testimony.

Mr. HUGHES. I say to my colleague from Michigan, welcome to ocean dumping. What we have been going through, we have an absolute merry-go-round.

Mr. SAWYER. Keep it in the ocean and not in the Great Lakes.

Mr. HUGHES. I thank you.

Is the chairman going to have other rounds?

Mr. D'AMOURS. The chairman was aware thaata the gentleman's time had expired. The chairman doesn't recall having reminded him of that fact.

Mr. HUGHES. I want to say I thank my chairman first of all. You are in for trouble today, I tell you.

Are you aware of what is happening off our coast? New Jersey Department of Environmental Protection is now closing down certain fisheries at the mouths of some of our rivers because studies have now determined that there is some intake, uptake into some of the shellfish, some of the bluefish are showing traces of PCB's. Are you aware of that?

Mr. EIDSNESS. Yes

Mr. HUGHES. Are you aware of the fact that almost every month we see new advisories coming out of DEP, closing down fisheries in our area?

Mr. EIDSNESS. I am not aware of that fact, but I assume it is correct.

Mr. HUGHES. Given those facts, when do we arrive at a conclusion that the area is unreasonably degraded? Do we have to wait for somebody to die because of contamination?

Do we have to wait for a commercial fishery to be destroyed?

Do we have to wait for the resort industries along my coast to suffer serious economic reversals before we determine that the area is unreasonably degraded?

Mr. EIDSNESS. Congressman, it would be inappropriate and illegal if I told you that the decision was that it was unreasonably degraded, because of the statutory connotations of that term which you of course are very well aware of. That is the way Congress set up the law, a permit process and a siting process, to make such legal determinations after full public participation.

I think from the technical scientific point of view we certainly know that there are areas where there is degradation. We detect contaminants that are there. The sources of those contaminants are not always ocean dumping, as you are well aware.

Mr. HUGHES. I find it very interesting that you want to talk about the law.

Mr. EIDSNESS. That is right.

Mr. HUGHES. The law is what we passed which you guys refuse to enforce. I mean that is why we are in the bind we are in.

Mr. EIDSNESS. We are enforcing law.

Mr. HUGHES. EPA refused to appeal a lower court decision which just flew in the face of a statute passed by the Congress, and shoved it off to the Justice Department. That is why we are where we are.

Mr. D'AMOURS. The gentleman's time has expired, and there will be another round of questioning if the gentleman wants to pursue it at that time.

Mr. HUGHES. Thank you, Mr. Chairman.

Mr. D'AMOURS. I am going to have to advise the members of the committee and the witnesses that I have to leave the hearing for another appointment. I would hope that Mr. Hughes and Mr. Sunia would take the chair in my absence to finish the hearing and close it. But before I do, I would like to ask Mr. Matuszeski, the gentle-

man from NOAA, who after all is the person who testified here today, as to the rather severe cut in research budget to which Mr. Hughes was just referring.

Mr. Matuszeski, I would like to ask you, you say in your testimony you want to provide the best available scientific information on marine environmental quality.

How can you provide the best available scientific information on environmental quality when you are terminating all regional pollution projects, terminating the program for developing marine pollution measurement techniques, terminating pollution research conducted by the sea grant college, terminating the Northeast monitoring program, and terminating the Great Lakes pollution research?

How do those two statements jibe?

Mr. MATUSZESKI. Mr. Chairman, I would submit that the evidence this morning has indicated relatively little relationship between the amount of money expended in these programs and the results achieved.

NOAA has spent \$230 million in 10 years in this arena and obviously we have not satisfied many Members of Congress.

The reductions we are taking will allow us to continue the programs that we believe have the necessary flexibility and necessary directives to reach out and deal with the problems that are most important in our coastal areas.

The steps we have taken internally to deal with these reductions we believe will more than offset the effects of the dollar reductions.

We have reorganized our entire marine pollution effort, brought it together literally under one roof, including the Ocean Assessments Division and Dr. Robertson's office under the National Ocean Service.

We have undertaken a complete program review of this area that was sufficiently impressive to the Deputy Administrator that he carried out a further review of other marine pollution activities beyond NOS: this involved substantial recommendations to improve the way we carry out our marine pollution programs.

Finally, we have significantly improved our coordination with EPA. We have more meetings with EPA at the level of officials who can make important policy decisions today than at any time in the past 5 years.

We believe that these changes will more than offset the reductions in dollar expenditures in these programs.

Mr. D'AMOURS. Let me be a little more specific then.

Let me zero in on the termination of the regional pollution projects.

A draft 1981 report argued that or stated that:

Most marine pollution issues are best addressed on a regional basis when the unique environmental attributes and problems of the region can be given adequate consideration.

A regional perspective transforms abstract concepts into real world pollution problems which in most cases are easier to manage.

You are eliminating pollution projects. Now, this is NOAA's own draft 1981 July report that I quote from. You are cutting that off in 1984 having said this is the best way to go about it. How does

that reorganization somehow improve our ability to gather scientific information?

Mr. MATUSZESKI. Mr. Chairman, I believe we still support those statements. The question is whether the only regions on which we should focus most of our attention, should be the two or three regions identified in those existing budgetary line items.

For example, there are developments going on in southern California right now which are not included under those regional projects, but which we fund out of our continuing efforts under section 202 and section 6, programs that have more flexibility to direct attention to those regions where there are important emerging issues.

We consequently believe we will be able to provide the assistance necessary to the regional studies while at the same time having the flexibility to move the program into those areas where the results of the regional studies will have national impacts.

Mr. D'AMOURS. You do have that flexibility to move the programs; you are not doing it; instead you terminate them.

Mr. MATUSZESKI. We are not terminating those programs that have the ability to move from region to region.

Mr. D'AMOURS. You are not terminating all regional pollution projects?

Mr. MATUSZESKI. We are terminating those region-specific projects, that is correct, sir.

Mr. D'AMOURS. Which includes all regions?

Mr. MATUSZESKI. It includes the MESA Puget Sound projects, the Northeast monitoring program, and the MESA Hudson-Raritan Estuary project.

Mr. D'AMOURS. You are planning regional pollution projects then?

Mr. MATUSZESKI. We will be funding projects that will be dealing with estuarine and marine pollution issues in regions throughout the country, including the Hudson-Raritan Estuary and Puget Sound where these seem to be the testing grounds for the most important issues.

Mr. D'AMOURS. What happened to your list of regional projects? You had a whole list of them that you were going to do. What happened to that list?

Mr. MATUSZESKI. That list will continue to be considered in our expenditures of the section 202 and section 6 moneys in fiscal 1984.

Mr. D'AMOURS. So you would be funding that list of regional projects?

Mr. MATUSZESKI. We will be selecting projects on a priority basis from that list as well as other analyses that we have done as part of the complete review of this program that we have just completed.

Mr. D'AMOURS. How do you determine which regional projects are worthwhile performing and which are not?

Mr. MATUSZESKI. I would like to turn that question over to Mr. Ehler who will be making those decisions. I am sure he will give you some sense of confidence about that.

Mr. EHLER. We set our priorities on the basis of several documents including the current national marine pollution program

plan. That document identified priorities for marine pollution research and we try to conform with the intent of that plan.

We have also made, as Bill mentioned—

Mr. D'AMOURS. I understand you are going to tell me any number of ways you have to make determinations and it will sound great. Haven't you had that ability right along though?

Mr. EHLE. I think we have had that ability, yes.

Mr. D'AMOURS. Why are the—why a change in process? Why do you terminate regional projects?

Mr. EHLE. Again, priorities change with respect to the information and the amount of knowledge we have available vis-a-vis different regions.

We know a great deal about several regions of the United States; we know virtually nothing about many other areas that may in fact be the areas that will—

Mr. D'AMOURS. I don't want to get Mr. Hughes upset but what is your priority in the New York Bight?

Mr. EHLE. Again I would say that if you limit your question solely to ocean disposal, certainly the New York Bight region is the area of highest importance right now.

On the other hand, if you look at the demand for ocean dumping over time it is clear that other areas will have similar pressures. We just don't want to be caught in—

Mr. D'AMOURS. We are coming around the mulberry bush for the fifth time now, and, as I indicated, I have to go and I apologize for having to leave in the middle of this testimony, but if I get any dizzier I won't be able to find my office and if I listen to you much more I am going to get dizzier.

Mr. Hughes, why don't you take over the chair?

I apologize for having to leave, ladies and gentlemen.

Mr. HUGHES [presiding]. Mr. Forsythe, do you have further questions?

Mr. FORSYTHE. Thank you.

Mr. Matuszeski, it would be helpful if you could supply a breakdown of specific programs or projects encompassed by the 4.8 million request under title II—a breakdown of how and where this money will be spent. Is that possible?

Mr. MATUSZESKI. Yes, Mr. Congressman. We will be able to provide you with some general areas of expenditure for fiscal 1984. We can also provide you with specifics for the current fiscal year.

Mr. FORSYTHE. For 1983?

Mr. MATUSZESKI. Yes.

[The following was received for the record:]

BREAKDOWN OF PROGRAMS FOR FISCAL YEARS 1983 AND 1984

Fiscal year 1983

In fiscal year 1983 over 60 marine pollution projects are being funded with monies available from Section 201 and 202 of the MPRSA and Section 6 of the NOPPA. The general goal of these projects is to develop the best available scientific information on marine waste disposal and pollution to aid policy- and decision-makers in Congress, other Federal agencies, state and local governments, the private sector, and the public. The NOAA marine pollution program accomplishes these goals by managing and sponsoring research performed by scientists and engineers from NOAA laboratories, other Federal agencies, state and local governments, industry, academic, and research institutions.

In fiscal year 1983 the program focus is on key processes related to contaminant distributions and biological responses in selected coastal regions, including Puget Sound, the New York Bight, and adjacent Hudson-Raritan Estuary, at a recently abandoned sewage sludge dumpsite off the mid-Atlantic coast, and at deep ocean disposal sites on the Atlantic and Pacific Coasts.

Studies of the New York Bight have centered on defining the spatial limits to contamination due to discharges into the Hudson River and waste dumping in the Bight. Contamination is being found to extend to about 20 miles offshore. Also, dumped dredged material in the New York Bight continues to be a source of contamination to overlying waters. Studies in the Mid-Atlantic Bight have found pathogenic viruses, amoeba, and bacteria in sediments surrounding the dumpsite used by Philadelphia for sewage sludge disposal until cessation in November 1980.

These and other findings indicate that the long-term and cumulative impacts of waste disposal in the ocean should be an important consideration in future management decisions. The NOAA program in fiscal year 1983 contributes to these decisions by supporting studies of oceanic processes, experimental and modelling studies of waste behavior, and empirical studies at waste disposal sites.

Wastes dumped at deep ocean sites are extensively diluted in the dumping process. Waste concentrations, except in relatively fresh plumes, are below those which laboratory tests indicate affect marine organisms. The rate of flushing of these sites appears adequate to prevent a significant accumulation of waste from repeated dumping events. In fiscal year 1983 our program focuses on delineating the vertical and horizontal dispersion characteristics of the potential disposal areas off the continental shelf of the Atlantic seaboard.

The consequences of various sewage effluents and sludge management alternatives on public and ecological health cannot be assessed without determining the scale and duration of contaminant exposure fields. Scientists have been moderately successful at predicting and mapping exposure fields for a few contaminants in regions where single sources of contaminants dominate, and where variations in currents and meteorological conditions have been documented. These methods must be extended to apply to other contaminants and to more complex hydrographic regimes.

Existing field techniques and physical and mathematical models were applied to resolving remaining uncertainties about the chemical exposure fields in several well-studied areas now being examined for sewage effluent and sludge disposal alternatives. These include sewage and sludge inputs into the Hudson-Raritan Estuary/New York Bight Apex area and the Southern California shelf; and proposed sludge disposal in deep water off the U.S. northeast coast and into deep basins off the Southern California coast.

Increased levels of treatment and increased dilution and dispersion are assumed to reduce the amount and concentrations of potentially toxic and biologically active chemicals. However, pre-treatment of advanced methods of sewage treatment and disposal may not reduce the amounts of biologically available chemicals or the overall toxicity of effluents and sludges. In fiscal year 1983, we are investigating how pre-treatment, advanced sewage treatment (including digestion of sludges), or advanced barge dispersion engineering technology would affect the biological availability and toxicity of a variety of natural and synthetic hydrocarbons.

Pathogenic bacteria and enteric viruses (e.g., hepatitis and polio) occur in sewage and have been recovered from shellfish and swimming beaches in sewage-contaminated waters, but these pathogens are not routinely measured and there have been no recent closures of shellfish beds or beaches as a result of direct measures of pathogens. However, many estuarine and nearshore areas are occasionally closed to shellfish harvesting and bathing as a result of locally high coliform concentrations, which are presumed to indicate a potential health hazard from pathogenic microorganisms. In 1982 with NOAA funding, two procedures were developed to isolate enteric viruses from marine samples. NOAA continued work in fiscal year 1983 on the distribution and persistence of pathogenic organisms to identify threats to the marine environment and man. In fiscal year 1983 we have designed a program which combined field measurements, laboratory (identification) studies and process modelling. Our modelling effort focused on the development and refinement of a model for virus cycling through the marine environment.

Scientists from many countries are carrying out research on wastes in the ocean. Research conducted by each country benefits all other countries. NOAA sponsored an International Ocean Disposal Symposium in fiscal year 1983 for the purpose of sharing scientific information on a wide variety of processes and effects associated with waste disposal in the marine environment.

Finally, work supported in fiscal years 1981 and 1982 showed that the toxicity of certain trace metals, such as copper and cadmium, is strongly dependent upon the chemical state of the metal and upon ratios of different metals in the system. Organically complexed metals exhibit much lower toxicity than do free ionic metals. In fiscal year 1983 we studied the capacity of marine systems (planktonic communities) to generate organic materials that can complex with trace metals in order to quantify the amounts and forms of metals that can be safely introduced into the marine environment.

Fiscal year 1984

In fiscal year 1984 our program focus and priorities will be:

Increased emphasis on the assessment of national marine pollution problems;

Increased emphasis on the synthesis and presentation of information for decision-making purposes;

Development of national data bases on the spatial and distribution in time and space of pollutant inputs to the marine environment from all sources and the distribution of living marine resources-at-risk from marine pollution;

Development of methods with which to use these data bases for the evaluation of national ocean resource use strategies related to marine pollution;

Development, with the U.S. Environmental Protection Agency, of operational procedures with which to carry out multi-media assessments of municipal sludge management alternatives;

Development of a national monitoring program with which to assess the status and trends of the "health" of the Nation's estuarine and coastal waters; and

Development of the NOAA program to assure the quality of environmental measurements and to ensure the inter-regional comparability of marine pollution data.

Mr. FORSYTHE. I would like to compliment NOAA for pulling this research into one area. I guess my only question is why it hasn't happened much earlier. Obviously we would all have been a lot better off if we could have concentrated all these dollars in one area. I suspect that one reasonable response to that was that we would not let you do it; that is, the Congress wouldn't.

Is there anything in a legislative way that would still be impeding or could expedite the interagency coordination of ocean pollution research?

Mr. Matuszeski?

Mr. MATUSZESKI. I think that is an excellent question. We have had under review through GAO and others, of course, some recommendations on how we might strengthen the interagency effort.

Our reading of that issue at the present time is that the current structure and organization is sufficient for us to carry out the intentions of the statute.

We believe that with the organizational and personnel changes we have had by putting in new leadership, such as Dr. Robertson and Mr. Ehler, that we will be able to make significant progress in carrying out better the provisions of the statute.

Mr. FORSYTHE. One of the areas that began to concern me more recently is the growing realization that I don't believe we even know on a quantitative basis—or even on a qualitative basis—the sources of pollution in the New York Bight. How much is coming from where? In any comprehensive way, we don't know that.

It has been suggested that while the information is there, it just needs to be put together. However when you consider street runoff, and the different types of systems where you have joint storm sewer and sanitary systems, the input into the New York Bight is so complex.

I think it is one of the things that we ought to find a way to get at. I would like your comments, and Mr. Eidsness seemed to be fishing there. Have you got something to tell me?

Mr. EIDSNESS. Fishing; that is an encouraging word.

Mr. FORSYTHE. It may be a little ways out of the Bight as Congressman Hughes points out.

Mr. EIDSNESS. I would like to have Mr. Caspe of our EPA Regional Office give a summary of EPA involvement in identifying sources of pollution in the Hudson River New York Harbor complex.

Mr. CASPE. I guess it all starts under the Clean Water Act, section 208, in 1975 or 1976, when we funded New York City to the tune of approximately \$8 million for a 208 areawide study. That was \$8 million, and \$4 million of it went to upgrading of a model of the entire harbor complex.

It was originally designed back in the 1950's for the Interstate Sanitation Commission, but had not been properly verified, and the grid system and so on wasn't as tight as we would like it to be for decisionmaking purposes.

So, with \$1 million what we did through some fairly heavy math modeling as well as some heavy sampling and verification studies is develop a model for the harbor which took into account combined sewer overflows, waters coming down the Hudson and through Long Island Sound, and the pollutants that might be within the waters as a boundary condition; waters coming back from the Bight, the open ocean back to the harbor complex, and all the industrial dischargers and municipal dischargers within the harbor complex.

We can say it is basically a transport model; we have recently varied the loadings of that model for obviously we have a 301(h) waiver program which concerns us, but we can, by varying the loads, determine that impact on dissolved oxygen, for instance, throughout the harbor on a rather favorably specific basis.

In fact, in the Hudson River, we can tell you the difference at various locations between the top level and the bottom level. So there is a very detailed tool available which is being used.

Mr. FORSYTHE. How about for heavy metals—PCB's and so on?

Mr. CASPE. As far as for testing for toxic levels, we have not used it for that recently.

Mr. FORSYTHE. Do you have the data on BOD?

Mr. CASPE. It is a transport model. In other words, anything coming in, we can find out what is coming in and then we can—now, we obviously know BOD is coming in. This is a conventional pollutant that has been looked at for years, BOD.

Mr. FORSYTHE. My question originally was about the data. We don't know what the data are with respect to what is going in.

Mr. DAVIES. Could we pass this to NOAA? They have done extensive studies and they have reports they can refer to.

Mr. FORSYTHE. If we can find out what is there and you can tell us where it is transported, that is all right.

Mr. MATUSZESKI. Mr. Forsythe, the very capable staff seems to have come up with two very heavy reports here, which we will be happy to present to you at the end of the hearings.

Mr. FORSYTHE. Please do.

Mr. MATUSZESKI. One is dated April 1976, Contaminant Inputs into the New York Bight; and the second is dated August 1982, Contaminant Inputs into the Hudson-Raritan Estuary. So the data have been collected.

In addition, NOAA's Ocean Assessment Division collected information nationwide through its National Pollution Discharge Inventory, which we have been able to use in the development of a series of strategic assessments to provide ocean users of all types with information related to the effects that their decisions, their construction activities, and their permitted activities might have on the entire picture of pollutant discharges.

Dr. Ehler may want to give you a quick rundown on this program.

Mr. FORSYTHE. I am sorry to say I have gotten my notice. Maybe we will have to go to another round, because my time has expired. We appreciate those documents.

[The above-mentioned documents may be found in the subcommittee files.]

Mr. HUGHES. The gentleman from Michigan, Mr. Sawyer.

Mr. SAWYER. No questions, Mr. Chairman.

Mr. HUGHES. Mr. Eidsness, what are EPA's present monitoring requirements for large ocean dumpers?

Mr. DAVIES. Mr. Hughes, each of the permits we issue for ocean dumping has very specific monitoring requirements applied to them, and the permittee is required to report very frequently to EPA on the results of those monitoring conditions.

Mr. HUGHES. Who is doing the monitoring, the applicant?

Mr. DAVIES. The applicant and EPA in some cases. For instance, we brought the EPA ship into the New York Bight for a series of experiments last summer, and we plan to do that on frequent intervals to check that.

Mr. HUGHES. What is that, spot checking?

Mr. DAVIES. We are looking at if there is any buildup of toxic materials in the sediments and in tissues, and we wouldn't see that done on a frequent basis. That is a long-term study which perhaps at this point isn't fully outlined in the permit conditions.

Mr. HUGHES. Is it safe to say the monitoring basically is being done by the applicant? By and large it is?

Mr. DAVIES. Yes, sir.

Mr. HUGHES. What specifically is the applicant required to do?

Mr. DAVIES. The applicant—it depends on the permit, sir. These are very specific to the waste that is discharged that they are required to monitor, conventional pollutants, for example, at the site on frequent intervals. They are required to characterize the wastes disposed of, and I believe they also do some ecologic testing at the sites. We follow that up now with some on-site monitoring that NOAA has been doing.

And when I was director of the Narragansett Lab, which I was until a short time ago, we had ourselves instituted some biomonitoring in the bight particularly to look at the uptake of toxic materials and heavy metals and to look at the potential for diseases in fisheries.

Mr. HUGHES. How often does EPA actually do on-site monitoring themselves?

Mr. DAVIES. The program with the region II and the Antelope is once a year, the research monitoring that is done there is once every 3 months, or it was through the summer. We may have changed that experimental design.

Mr. HUGHES. Under the proposed reductions, are we to assume there will be a change in the monitoring techniques and practices?

Mr. DAVIES. Yes, sir, I would expect that we would specify quite stringent monitoring terms if the decision is made to redesignate the site and continue dumping in the New York Bight.

Mr. HUGHES. Can we expect EPA to do less on-site monitoring?

Mr. DAVIES. No, sir. In fact, we have increased our research budget for ocean dumping and one of the areas we are concentrating on is the New York Bight area.

Mr. HUGHES. Are the monitoring requirements in your judgment sufficient to allow for such a determination on whether or not there is an unreasonable degradation?

Mr. DAVIES. Sir, we have a task group we have put together that will be meeting through this summer, very intensively, with NOAA membership, that will be considering the site designations and monitoring protocols for specific wastes for those sites, and I think we will, if we decide to redesignate the sites and permit further dumping, we will have quite stringent monitoring programs set up that will be able to answer your questions on an unreasonable degradation. We have to face this issue this summer. That would be then both a legal and scientific judgment.

Mr. HUGHES. You are saying that you cannot say yes or no to that right now?

Mr. DAVIES. I would agree with what Pete Anderson said at the last hearing, that scientifically we have degradation there, whether legally we can say unreasonable degradation is something that we have to go through rulemaking on, and I think that is what we are trying to avoid, is making a statement that will be a prejudgment of some very intensive site designation work we have to do this summer.

Mr. HUGHES. It sounds to me like you have yourself in a bind.

Mr. DAVIES. I agree.

Mr. HUGHES. First of all, as I indicated before, you didn't appeal the *Sofaer* decision. Now you are stuck with it. You can't perform the mission that you are obligated to do in your agency, that is, to determine whether or not the ocean dumping that is taking place is harmful to the environment.

Mr. EIDNESS. Well, Mr. Chairman, we can discharge our duty. We are still going through the process of reconsideration of site designation; that decision has not yet been made for the Twelve Mile Site. We have not even formally proposed it, for that matter. We have not acted on permit applications concerning ocean dumping in the New York Bight, for the simple reason that we have not received permits. When the time comes, we will do that.

Mr. HUGHES. Mr. Eidsness, I have heard that argument before, and it is a lot of nonsense. It is nonsense. You are quibbling about what is the reasonable degradation. What does it mean? You don't know because of the legal question. Scientifically, you can't quarrel with the fact that the New York Bight is the most distressed body

of water in this country, if not in the world. If that is not unreasonably degraded, I am not sure what test you would use.

What you are saying to us is you don't know whether to say whether it is unreasonably degraded because you don't know legally what is meant by unreasonably degraded under the *Sofaer* decision.

Mr. EIDNESS. The answer comes at such time as formal rulemaking is made by the agency concerning site designation and/or a specific permit application. That is the statutory test. The Environmental Protection Agency must meet that. I came here and gave an oath to uphold the laws that I administer. So I cannot, as Dr. Davies said, I cannot say anything here today that suggests a prejudgment of the due process of law that the EPA must follow in making such legal determinations.

Mr. SAWYER. Will the gentleman yield for a question?

Mr. HUGHES. Be happy to yield to the gentleman.

Mr. SAWYER. This trial court decision, why was it not appealed? Why was it determined not to appeal that to the court of appeals?

Mr. EIDNESS. Well, I can't give you a good answer to that: (1) I am not a lawyer; (2) I wasn't in office at the time that took place. But in simple terms, what I understood occurred—from which maybe either logic or illogic can be drawn, depending on your view—as the judge said, it was arbitrary for the EPA to deny a permit for ocean dumping simply on the basis of laboratory testing criteria that we promulgated by rule; that we had to allow the applicant the opportunity to demonstrate need, which means alternatives to ocean dumping.

That was the crux of the issue. The judge directed us to go back and modify our regulations, which would provide that the applicant may determine need or must determine need in terms of alternatives to ocean dumping as a condition of his fulfilling this permit application requirement.

Mr. SAWYER. If there is unhappiness with that decision, why don't you provoke another case by denying a license on the same basis? You can get another shot at it.

Mr. EIDNESS. I expect very much that we will be denying permits in the future. There is no question in my mind that we will be denying permits. Specifically, I don't know which ones, but there are certain types of contaminants, for example, which we have international treaty obligations to ban their disposal in the ocean, and we would not issue a permit for those types of wastes.

Based on the knowledge that I have acquired since I have been in this office, approximately a year now, the potential exists that we would deny permit applications for ocean dumping.

Mr. SAWYER. The point I am making is if you feel this decision is damaging to you and you don't—there is no reason I have heard yet why you didn't appeal it—it would seem to me as a Federal agency you would have an easy opportunity to provoke in a different district the same question by disallowing another application and seeing if you can't get that changed.

Mr. EIDNESS. I am not lawyer. Perhaps that is a viable approach, I don't know. Personally, I find that a little bit difficult to swallow inasmuch as it would require us to violate a court order in order to provoke another court decision concerning the issue. I

would prefer to see the Congress deal with the issue than have it provoked in court.

Let me explain another aspect of this issue. To presume that the ocean is not a viable option for waste management or disposal under proper conditions would acknowledge the theoretical possibility that we would make decisions concerning disposal of wastes on the land, in the air, that were more hazardous in a relative sense from the human health and environmental point of view.

In a theoretical sense, that is the rationale that was supporting the former administrator's decision not to appeal this particular court decision. In other words, the ocean may be under certain circumstances a better alternative environmentally, and from the health point of view, than alternatives such as land disposal or incineration.

Mr. SAWYER. I thank the gentleman.

Mr. HUGHES. The gentleman from New Jersey.

Mr. FORSYTHE. Thank you, Mr. Chairman.

Mr. Matuszeski, back to the area where we were when we got the documents out. Are you now able to develop a cleanup plan for the New York Bight? I mean across the board—not just for sludge but for toxics and so on.

Mr. MATUSZESKI. The development of such a plan would probably be carried out by EPA under either statute, and they have made comment in their testimony regarding the existing plans they have underway for such a cleanup.

Mr. EIDSNES. If I may elaborate, Congressman. Just last week I was in our New York regional office to get a full briefing as to the status of planning underway concerning the New York Harbor complex and the lower Hudson River. It is my—

Mr. FORSYTHE. You haven't gotten to the bight?

Mr. EIDSNES. And then the bight, yes. They are linked.

Mr. FORSYTHE. I agree.

Mr. EIDSNES. You understand that, yes.

Mr. FORSYTHE. I worry that you will cut me off—

Mr. EIDSNES. I would love to see, in my lifetime in this agency, EPA to be in a position to make decisions, regulatory decisions concerning applications for whatever from secondary treatment from the places that have applied for it, as well as issues concerning the Twelve Mile Site designation and permits pertaining thereto.

We are moving forward as rapidly as possible to bring these whole issues to closure because we cannot separate out the ocean dumping issue from the issues of pollution in the Hudson River.

Mr. FORSYTHE. We have to consider the runoff problems from the streets. Somewhere we have to put the whole thing together.

Mr. EIDSNES. That was what we were discussing last week. I think EPA suffers from, among other things, I am sure, is an inability to clearly articulate where we are with respect to planning and what the objective is.

The objectives, to me, are clear, we have States, New Jersey and New York, who have adopted water quality standards and beneficial uses under the standards for the harbor complex as well as the Hudson River, and we also have a statutory test of unreasonable degradation.

I think all these can serve as a basis to make these regulatory management decisions, and what we should do is come back to the committee at a future date, as I offered in my testimony, and give you a clearer picture of where we are and what we are trying to accomplish in that time frame.

Mr. FORSYTHE. One way or another I intend to find more of the information, because as you—

Mr. EIDSNES. There is a lot of information.

Mr. FORSYTHE. As you may not be fully aware, New Jersey is trying to make great strides in implementing a comprehensive structure. They can't do it without New York, Connecticut, and others being involved. This is just in that area.

I would ask one more question of you. I note from your testimony that you have undertaken a joint project to obtain scientific information on the recovery of the Philadelphia sludge dump site. What type of work are you doing now on the project? Do you have any tentative results?

Mr. EIDSNES. I would ask Dr. Davies to respond to that. He is more familiar than I, I hope; if not, we will get you something for the record.

Mr. DAVIES. We have been doing long-term studies on the Philadelphia dump site, not very systematic studies, but we have done studies on recovery. We felt it important to get back in there now and look at particularly viral and bacterial contamination in the area to see whether it subsided, whether it could be open or shell fishing, whether the levels of metals and other things that caused the decision to close the sludge site have been mitigated, how long it has taken for that site to recover, both in ecological and chemical studies of the area.

Mr. FORSYTHE. An tentative results?

Mr. DAVIES. Yes, sir. The levels of shellfish contamination are way down and I understand they are close to reopening the area.

Mr. FORSYTHE. In other words, if dumping were to end at the Twelve Mile Site, there is hope that there could be a recovery?

Mr. DAVIES. Yes, sir.

Mr. MATUSZESKI. I should point out that the Philadelphia site never received more than a small fraction of what the New York site has received.

Mr. FORSYTHE. I agree.

Mr. MATUSZESKI. At the same time, it is important to realize that with the exception of PCB's the New York site has contributed relatively small percentages to the overall pollutant levels within the New York Bight.

Mr. HUGHES. Would the gentleman yield?

Mr. FORSYTHE. I wanted to go to one more—maybe I have your question—I was coming back to PCB's.

Mr. HUGHES. All right.

Mr. FORSYTHE. Do you have any numbers on the proportion of PCB's in the Bight area?

Mr. MATUSZESKI. It is estimated that as high as 25 percent of the PCB problem can be attributed to ocean dumping at the Twelve Mile Site.

Mr. FORSYTHE. I would yield.

Mr. HUGHES. I understand the Philadelphia site has closed down, we still saw significant levels of bacteria.

Mr. DAVIES. That is correct.

Mr. HUGHES. And there was some evidence of uptake into the shellfish?

Mr. DAVIES. Yes, sir, that is correct.

Mr. HUGHES. The Philadelphia dump site is a major commercial fishery area in our region out of Cape May County, my home county. Does that present any problems to you that we see significant traces of bacteria in the food chain 15 months after we close the site?

Mr. DAVIES. Yes, sir, it does.

I agree that that is a great cause for concern, that that is one of the measures we use in looking at degradation of the site as to whether the shellfishery is contaminated, and is taken from the market.

Mr. HUGHES. What could happen to the people who consume shellfish in that area?

Mr. MATUSZESKI. If I could answer that—at the present time it is felt that existing levels could allow opening for shellfishing again and that action is under study. The last testing was done in the spring of 1982 and showed substantial progress toward elimination of the so-called black gill condition in crabs such that it was felt that the area could be considered for reopening.

Mr. HUGHES. My question is, what could happen to people consuming that? You know, during the time that we were using the dump site obviously there were high levels of bacteria, we find significant levels now.

What could happen to individuals eating shellfish from that area, and we have been, you know. Obviously you can close it down but that doesn't mean that you are not going to be harvesting shellfish either in that area or just outside of that area because I do not have to tell you that commercial fisheries really have no way of identifying quite often the areas of concern.

Mr. DAVIES. I think you have a health hazard to the people consuming them, Congressman.

Mr. HUGHES. I thank the gentleman.

Mr. FORSYTHE. No more questions.

Mr. HUGHES. Mr. Sunia?

Mr. SUNIA. I have no questions, sir.

Mr. HUGHES. Mr. Sawyer?

Mr. SAWYER. No questions, Mr. Chairman.

Mr. HUGHES. I just have a couple more questions. Can you tell me when we can expect some regulations?

Mr. EIDSNES. When we have Administrator, I would be more than happy to send you a letter and tell you what our schedule is. He will obviously have a lot of other issues to prioritize and my hope is that we have one for publication as a proposal this summer. I am ready now, but it hasn't gone through complete interaction or administration review, including OMB review. I hope this summer.

Mr. HUGHES. Is there any question if we ceased dumping sewage sludge in the New York Bight that we would do the following: Reduce nutrient and carbon load in the Bight which would reduce the oxygen depletion stress? Any question about that?

Mr. MATUSZESKI. There would be a reduction but it would be slight. We are talking about percentage of total load, in some cases below 5 percent.

Mr. HUGHES. Would the cessation of ocean dumping in the Bight reduce concentrations of contaminants in sediments and seafood organism?

Mr. MATUSZESKI. Once again yes, but it would be a small percentage of the problem with the exception of PCB's.

Mr. HUGHES. What percentage are we talking about?

Mr. MATUSZESKI. I believe in all cases below 5 percent.

Mr. HUGHES. OK.

Mr. MATUSZESKI. Mercury and PCB's are exceptions to that.

Mr. HUGHES. What are the percentages of mercury, PCB's, and cadmium in the sediments; what are the percentages as a result of ocean dumping of sewage sludge?

Mr. MATUSZESKI. The PCB's is 25 percent. We will have to supply the numbers for the others.

[The information follows:]

PERCENTAGE OF MERCURY AND CADMIUM IN THE SEDIMENTS

Contaminant inputs to the New York Bight and their composition and source are constantly being updated. The latest information we have on cadmium and mercury shows that ocean-dumped sewage sludge provides 1.6% of the total cadmium load to the Bight, and 4.1% of the total mercury load. NOAA is presently updating these values based on several recent studies. The values are not expected to deviate substantially from existing ones, but will be known in several weeks. This information will be provided to the Committee as soon as it becomes available.

Mr. HUGHES. Is there any question that cessation of sewage sludge dumping will reduce human pathogenic micro-organisms in the bottom sediments?

Mr. MATUSZESKI. Once again there is no question.

Mr. HUGHES. How about reduction of occurrence of viral strains of bacteria resistant to normally toxic concentrations of antibiotics?

Mr. MATUSZESKI. Once again, the same response.

Mr. HUGHES. Just one additional question.

While we go round and round over the niceties of the *Sofaer* decision and we are permitting ocean dumping, what responsibility will the EPA have if in fact we do have major problems with the commercial fishery, closing it down, causing economic loss, if in fact the tourist economy—which is a multibillion dollar industry in my area—is severely impacted by the dumping which is taking place as a result of permits granted by EPA, if in fact we have an epidemic because of the uptake into the seafood chain and we have people that are harmed healthwise, what responsibility legally will EPA take?

Mr. EIDNESS. You are talking about after the fact. I would like to think that EPA would have to act under our current statutory authority in a manner concerning permitting ocean dumping which would not allow that to occur where it is not now occurring.

Mr. HUGHES. Can you say with any degree of certainty that you will be able to prevent it given present circumstances? We know that these substances, PCB's, bacteria, cadmium, and mercury, are being deposited in varying degrees of toxicity, presenting risk to humans and to the economics in the area. We know that. We know

this is occurring. Can we tell with any degree of certainty whether we will have those problems.

Mr. EIDSNES. I think it depends on the wastes and it depends on the site.

Clearly we know more about the New York Bight area than we do others. But there is —

Mr. HUGHES. Will EPA be responsible for damage caused to economic potentialities in the area, or risk to humans if in fact it is a case where we have the type of calamity that I am describing as being possible?

Mr. EIDSNES. I am sure the answer to that legally is no. Morally I would like to think that we have a responsibility, but that may fall short of your concerns.

Mr. HUGHES. Why would you say that legally you wouldn't be responsible? You are granting the permits.

Mr. EIDSNES. I do not believe EPA has—can be held harmless for environmental impacts resulting from its permitting decisions in terms of a liability.

Mr. HUGHES. Are you telling me if your policy is a bad one and it brings about damage and risk to humans that EPA will not be bearing some legal responsibility?

Mr. EIDSNES. Not to my knowledge, but we will have to get back to you for the record on that one.

[The information was not received at the time of printing.]

Mr. MATUSZESKI. Mr. Hughes, it might be worth pointing out that if such an occurrence happened, the chances are overwhelming that it would be due to a type of coastal pollution resulting from an industrial or municipal discharge due to permitting by the State of New Jersey DEP rather than from ocean dumping being permitted by EPA.

Mr. HUGHES. I couldn't disagree with you more.

DEP would be a party defendant, too. I so not know any niceties in the law that will protect EPA from what is in effect poor policy or poor strategy in carrying out its function. We have the *Sofaer* decision and there will be other decisions along the line. If it is poor policy and if EPA has been part and parcel of that poor policy, I can tell you as far as I am concerned you are not insulated and you would be at risk just like New Jersey DEP in the event that occurs.

Mr. SAWYER. Mr. Chairman?

Mr. HUGHES. The gentleman from Michigan.

Mr. SAWYER. I am curious, you say that the suspension or abolition of ocean dumping in this New York Bight would only reduce the pollution by less than 5 percent. Why? Why would it be so small?

Mr. MATUSZESKI. Because the primary sources of pollution in the New York Bight are from discharges through the Hudson River, municipal wastes and runoff, from the Hudson and surrounding areas of New Jersey and Long Island, and dredged material as well.

Mr. SAWYER. Thank you.

Mr. HUGHES. The gentleman from Samoa.

Mr. SUNIA. I am curious to know why we have to wait until the EPA administrator comes onboard before this rulemaking procedure begins. Is that a matter of law?

Mr. EIDSNESS. That is just a matter of policy. The acting administrator views that certain of our regulations such as this, which are very controversial, should be brought to the new administrator for his decision. He might take a different approach than the policy developed up to this point in time.

We hope to have the administrator within the next few weeks, I might add.

Mr. SUNIA. I am curious still to know, was that not brought to the attention of the previous administrator? It seems to me it has been what now, 15 months, was that not brought to her attention before all the other matters?

Mr. EIDSNESS. No. I am afraid not. I think that when, along about last November or December, when the allegations were being made concerning the superfund program and the administrator found herself repeatedly before Congress and elsewhere, that her time was taken was taken up by those events and she was not able to put the attention on issues such as this that needed her attention.

Mr. SUNIA. Now, I am informed that we are going to have the confirmation hearings maybe about 3 weeks from now. Assuming the administrator gets confirmed, that will bring us to about mid-May and then you hope to have the rules finally established around December?

Mr. EIDSNESS. That is correct. As a proposal, yes.

Mr. SUNIA. Supposing you bring this to his attention and it does not get priority? What then? Are we looking at the fall?

Mr. EIDSNESS. That is a good guess, good as any. I certainly hope he meets with the chairman of this committee if he hasn't already, and perhaps at that time the committee can express its concern about the importance of this. I will certainly relay your concerns that this receive a high priority. I assume that is your concern. So EPA can be forthright in its proposals then as to how it will operate the ocean dumping permit program.

Mr. SUNIA. Than you, Mr. Chairman.

Mr. HUGHES. Thank you, Mr. Sunia.

When we had some of the applicants before the committee, mostly authorities and municipalities, I asked them about the same thing, that is what responsibility legally and otherwise do you think that you as dumpers would have in the event we have economic or other damage, or we have individuals harmed as a result of ocean dumping policies?

Their response was, well, we are only dumping where EPA tells us to dump. We have no responsibility.

Mr. EIDSNESS. Well, I will—

Mr. HUGHES. That is also the argument we receive in reference to toxic substances. In fact, as you know, there is a lot of litigation right now, in fact EPA is joined as party defendant where the response on the part of polluters is that you're the ones who determine where they dump the toxic substances; that it's EPA, and that New Jersey DEP and environmental agencies throughout the

country determine the sites; "all we do is dump it where you tell us."

The point I am trying to make is, you can't escape responsibility.

Mr. EIDSNESS. Sir, I do not want to be on record as having suggested that we escape responsibility. Clearly EPA has very important responsibility under the statute on making decisions which meet the statutory test.

One marvelous thing about a democracy is there are checks and balances. If one branch of government doesn't like a particular policy, there are remedies, there are ways to go at that.

Congress in its wisdom provided a system of rulemaking that provides the opportunity for public comment and discussion and debate. I would hope when EPA does propose a rule that would comport with the *Sofaer* decision, that it would generate that debate and that debate would lead to consensus on the final regulation. That is the processing we should pursue and it is one of my high priorities to be sure we do so in a forthright manner with full public participation.

Mr. HUGHES. OK, I have no further questions.

If there are no further questions—

Mr. FORSYTHE. Mr. Chairman, I would like to submit some questions.

Mr. HUGHES. Without objection, in fact I have questions I would like to submit also for the record, all members will be permitted to submit questions to EPA for your response.

[The information follows:]

QUESTIONS SUBMITTED BY MR. FORSYTHE AND ANSWERED BY THE ENVIRONMENTAL PROTECTION AGENCY

Question 1. I understand that NOAA and EPA recently sponsored a workshop in January in California to identify the type of information necessary to conduct multimedia analysis regarding the disposal of waste. What is the status of the results of that workshop? Do you have any indication now of the significant findings of the workshop?

Answer. EPA joined NOAA in sponsoring a National Academy of Sciences workshop in January 1983 entitled: "A Workshop on Land, Sea, and Air Disposal of Industrial and Domestic Wastes." The principal objective of the Workshop was to determine what types of information are needed to assess the options of land, sea, and air disposal of given types of waste at particular disposal sites and to determine the environmental, economic, and public policy criteria for selection among the options. Workshop participants are now in the process of drafting the reports of each of the six panels. The National Academy plans to present a draft report to the National Research Council Report Review Committee this month with publication planned for later in the summer. At this time EPA has not been briefed on any overall findings or conclusions of the workshop, although EPA staff participants could provide personal observations if you desire. Otherwise we will provide you with a copy of the NAS report as soon as it is available or you might contact the National Academy directly, through the Board on Ocean Science and Policy, National Research Council.

Question 2. Mr. Matuszeski indicates in his testimony that NOAA and EPA are developing a multi-agency strategy for conducting research on ocean dumping of sewage sludge and dredged material. Further, he notes that EPA is preparing an ocean dumping research program plan that will be the basis for a Federal research strategy. When will EPA complete the plan and when will we see the results?

Answer. The ocean disposal research program plan is expected to be completed and available late this summer. This research plan will address activities related to ocean dumping, ocean outfalls, dredge material disposal, drilling muds disposal, oil spill containment, marine water quality, and biomonitoring techniques. These research activities will be coordinated between EPA, NOAA, and the U.S. Army Corps of Engineers. In recognition of the different types of expertise, the three agencies

are attempting to gain optimal use of resources through this research plan. The research studies themselves are both short-term and long-term projects that will provide ongoing assistance to the marine programs.

Question 3. You indicate in your testimony that you are working with NOAA on hazard assessment at the 106-Mile Site. When will the results of your study become available? Will they be available in time to make a decision regarding the designation of the 106-Mile Site?

Answer. EPA and NOAA have worked together to provide information for use in making a decision regarding the designation. Outputs will include:

Summary of Physical Oceanography (NOAA technical Memoranda NMFS-F/NEL 17); available now.

106-Mile Waste Disposal Characterization Update Report; currently being reviewed, final draft due in June 1983.

J. F. Paul et al. Application of a Hazardous Assessment Research Strategy for Waste Disposal at Deepwater Dumpsite 106; symposium manuscript completed and in usable form now, final publication in about a year.

These items are/will be available in time to make a decision regarding the designation of the 106-Mile Site.

QUESTIONS SUBMITTED BY MR. FORSYTHE AND ANSWERED BY NOAA

Question 1. The Administration's budget request for FY 1984 proposes terminating NOAA's Ocean Dumping Program at a saving of \$2,470,000. Could you indicate what specific activities are affected by the elimination of this program? I am aware that at one point, an activity slated for FY 1984 under this program was the determination of the impacts of ocean dumping of municipal waste versus alternative methods of disposal. Will this activity be completed this year? If not, what is its status—will it be shifted to another program?

Answer. The Ocean Dumping Program is currently supporting approximately 25 research projects primarily through grants to universities. The research results are applied in several categories of activity: a) assessment reports of ocean dumping, b) development of site selection guidelines for ocean disposal of sewage sludge, c) dispersion models for sewage sludge at potential dumpsites, and d) management strategies for municipal sludge in the northeastern region. NOAA's research on ocean dumping emphasizes the relative environmental impacts of disposal at different ocean sites. Our analysis for the Northeast will be only in early draft form by the end of FY 1983 and will have to be continued under other programs. The specific project composition for FY 1984 under the reduced funding has not yet been determined. It is estimated that an orderly transition to the new funding level will require about one year, to close out existing grants and contracts without major loss of products.

Question 2. What are the effects of terminating the Northeast Monitoring Program—as is proposed in the FY 1984 budget request—NOAA's ocean pollution monitoring program?

Answer. The reduction proposed in the FY 1984 budget request involves less than one-half of the total NOAA resources committed to the Northeast Monitoring Program; therefore, the program will be reduced, not eliminated.

In addition to reducing the Northeast Monitoring Program, NOAA is changing emphasis from a monitoring effort concentrated in one geographic region to a broader approach focused more on national problems. NOAA will utilize what is being learned through research and monitoring efforts in the Northeast, combine this experience with monitoring programs conducted by other agencies, and will implement a cost-effective national monitoring effort useful for environmental quality management decisions in several regions.

The new monitoring approach will not ignore the needs of the Northeast, but rather will build a national monitoring program by adding new measurements and information from other impacted or threatened areas. This will also allow us to assess and compare estuarine and coastal marine environmental quality nation-wide by focusing our remaining resources on the most significant contaminants and their impact on human health and the most valuable living resources.

Question 3. In your testimony you indicate that NOAA will complete its regional Hudson-Raritan/New York Bight project by the end of the current fiscal year. What were the agency's objectives for this project? Can we assume that "completion" of the project means that you have achieved your objectives. If so, when will the results of this project become available?

Answer. The intense research efforts associated with the Marine Ecosystems Analysis (MESA) New York Bight Project of NOAA were completed in FY 1982. In addition to the project's large number of scientific contributions, the MESA program effort resulted in environmental assessments used in several management decisions. The project's findings are available in a concise synthesis volume entitled "Ecological Stress and the New York Bight: Science and Management," published in 1982 by the Estuarine Research Federation.

The Hudson-Raritan Project is complementing what has been learned in the New York Bight Project; its goal is to determine the influence of the Hudson-Raritan Estuary outflow on the environmental quality of the New York Bight Apex and Long Island Sound, and to provide scientific information and guidance for Federal, state, and local agencies for resource and regulatory decisions. The Hudson-Raritan Project objectives include: 1) the quantification of the distribution, fate, and flux of contaminants into and out of the estuary system; 2) the assessment of the contribution of the contaminants in the estuary to the reduced abundance of fishes and shellfishes in the New York-New Jersey-Connecticut metropolitan areas; and 3) the development of the nationally applicable alternatives to existing waste management practices that will enhance the use of pollution-impacted coastal and estuarine resources.

By the end of fiscal year 1983 we will have made significant progress toward the accomplishment of the first two objectives. We believe, however, that full accomplishment of all three objectives of the project, but particularly objective No. 3, are better achieved through a research and assessment effort that would include simultaneous studies of several geographic areas. Therefore, we propose to terminate the intensive site-specific research efforts in the Hudson-Raritan Estuary, and approach estuarine pollution problems on a nation-wide basis using our remaining resources.

Question 4. On page 111 of the most recent National Marine Pollution Program Plan it is stated, "Many marine pollution problems are addressed most appropriately on a regional basis so that the unique environmental attributes and problems of the region can be considered." Further, the July 1982, GAO report on the National Ocean Pollution Planning Act indicates that, "Federal scientists generally agree that ocean pollution research is best coordinated and most useful when done on a regional basis." Can you reconcile these statements with the Administration's proposal to terminate the regional pollution projects in fiscal year 1984?

Answer. NOAA believes that regional pollution projects must be carried out in the context of a coherent, national program. In fact many analyses of marine pollution issues are most appropriately conducted at the national level. This approach does not eliminate or replace the need for regional and site-specific projects. Instead it argues for a balanced, complementary approach carried out at all levels of government. We will continue to emphasize the need for practical, regional applicability of our results and, in accordance with Public Law 95-273, the National Ocean Pollution Planning Act, we will continue to seek coordination and cooperation among Federal, states, and local (regional) agencies. By decreasing NOAA's present emphasis on one or two specific geographical regions, we will increase our ability to consider a larger number of regional and national pollution issues; this will strengthen (rather than weaken) the capability of our research and monitoring efforts to be responsive to regional needs.

Question 5. In your view, does increasing the interim between the revision of Federal pollution plans from two to three years (as per the 1982 Congressional Reports Elimination Act) improve the operation of the planning process? How would the additional time between plans be used?

Answer. The 1982 Congressional Reports Elimination Act has changed the time period for revision of the National Marine Pollution Plan for Ocean Pollution Research, Development and Monitoring from two to three years. Experience in preparing the first two National Plans has indicated that a lead time of approximately 18 months is necessary to revise the National Plan. This time period is required to satisfy statutory requirements to reassess national research needs, analyze on-going agency program activities and accomplishments, and recommend changes in research programs.

The longer time period by the amendment, therefore, offers two primary advantages. The first is the increased time to focus on implementation of the recommendations in one National Plan before moving on to developing and implementing the next plan. As indicated by Mr. Matuszeski's testimony on H.R. 1546, several programmatic activities are currently underway to implement recommendations contained in the Second National Plan. These include: (1) research efforts related to long-term low-level effects of oil and gas development on the outer continental shelf; (2) improved coordination of quality assurance programs among Federal agencies to

measure chemical constituents in the marine environment; and (8) an evaluation of future coal use in coastal areas and related research needs. Each of these activities represents on-going, multi-year efforts and involves several Federal agencies. Our experience has shown that the two-year period between plans does not usually provide enough time to adequately complete such efforts.

The second advantage of the expanded time period between plans is that it provides increased opportunities to focus on developing detailed plans in specific problem areas. The overall National Plan must, by necessity, deal with a rather large number of marine pollution issues. Given the resources available for the effort, this has had some tendency to prevent planning in enough detail to be of maximum utility. The increased time will allow the National Marine Pollution Program Office (NMPPPO) and the involved agencies to focus on developing interagency plans for certain high priority problem areas. We are presently initiating such a planning effort for research and monitoring related to radioactive waste disposal and are attempting to initiate a comparable effort for ocean dumping research and monitoring. The results from such planning efforts will be published as separate documents and will also be used to provide the basis for sections on these issues in the Third National Plan.

During the time between revisions, NMPPPO will continue to publish annual updates of agency program summaries and a project catalog for the eleven Federal departments and agencies conducting or supporting ocean pollution research.

These documents serve as Appendices 1 and 2 of the National Plan and provide comprehensive descriptions of the objectives and milestones of agency programs and a detailed listing of research projects generated by an automated data base. It is our belief that the extended time period will allow for the continued effective implementation of recommendations from the Second National Plan and the publication during September, 1985, of a Third National Plan which updates priority national research needs and provides greater detail on agency responsibilities to conduct related research.

Question 6. Your testimony indicates that NOAA is reviewing its marine pollution programs to determine how information required for marine pollution management decisions can be developed in a more cost-effective manner. What is the status of that review? Are you able to summarize the programmatic changes you anticipate in light of that review? What regional and/or site-specific analyses will be included in future NOAA research efforts under Title II and NOPPA?

Answer. The NOS review was conducted in February. It was found that NOAA's marine pollution programs have emphasized descriptive or process-oriented research directed primarily at site-specific problems. This research has been very valuable in increasing the understanding of general ecosystem functioning and pollutant effects. The research has not, however, been effectively directed at decision needs, simply because the information needs are rarely, if ever, rigorously defined prior to design and conduct of research programs. NOAA proposed to couple future research efforts more specifically to identified decision needs. We believe that in this way the research can be directed much more effectively at obtaining information specifically required for making choices among specified management options.

Areas that will be emphasized more heavily in our research program include defining management frameworks and analytical approaches for application of those frameworks, establishing procedures for explicit and standard incorporation of resource values into the decision process, and quantifying the large-scale, cumulative environmental effects of different human activities. We propose to apply this approach to selected problems of several different scales, emphasizing the development of standard methodological approaches that will be useful to related problems in other areas.

Problem areas proposed for study under this approach include continued efforts on sewage sludge management in the Northeastern U.S. and a new effort in the Southern California.

Question 7. A July 1982, GAO report on NOPPA made several recommendations to the Commerce Department for more effective coordination of ocean pollution research. These include:

Proposed amendments to the National Ocean Pollution Planning Act to give NOAA, or an appropriate interagency coordinating committee, explicit authority to review Federal agency research budgets before they are approved by OMB; and

Directing NOAA to include in future pollution research plans exactly how Federal research money and responsibilities be allocated throughout the Federal Government.

Have these recommendations been considered by the Department. If so, can you comment upon the status of their implementation?

Answer. The Department of Coce has officially responded to the recommendations contained in the report from the U.S. General Accounting Office, "Need to Strengthen Coordination of Ocean Pollution Research". (See Attachment—Comments of National Marine Pollution Program Office, National Oceanic and Atmospheric Administration, Department of Commerce, July 14, 1982). As indicated by your question, two main recommendations were provided by the report.

The Department of Commerce does not support a legislative amendment to the National Ocean Pollution Planning Act to provide NOAA or an appropriate interagency committee greater authority to review ocean pollution research budgets of Federal agencies before they are submitted to OMB. The Department, instead, endorses a process of informal budget coordination with OMB, the Interagency Committee on Ocean Pollution Research, Development and Monitoring (COPRDM) and eleven Federal agencies and departments which conduct or support marine pollution research.

Since enactment of the National Ocean Pollution Planning Act, the National Marine Pollution Program Office (NMPPPO) has coordinated pollution-related budget information among involved Federal agencies. NMPPPO annually updates the level of Federal funding for marine pollution programs of involved Federal agencies. This information is distributed to involved Federal agencies, Congress and other interested parties, and is incorporated in the National Plan and agency pollution program summaries. The possibility of conducting informal budget coordination in certain program areas has been discussed with the Office of Management and Budget and will continue to be pursued.

The Second National Plan, issued during 1982, discussed how research responsibilities should be allocated among COPRDM agencies based on agency missions. Specific research and coordination tasks have been outlined for respective agencies for priority research areas. Further detail can be expected in future revisions to the Plan.

Question 8. Finally, I want to reiterate my request at the hearing that NOAA supply the Subcommittee with a breakdown of the specific programs or projects encompassed by the fiscal year 1984 \$4.8 million budget request under Title II.

Answer. In fiscal year 1983 the \$4.8 million budget funds will be spent as follows: \$2.4 million—Process/Effects Study; \$1.2 million—Monitoring; and \$1.2 million—Synthesis/Assessment.

In fiscal year 1984, NOAA's research effort on ocean processes and pollutant effects will be reduced by about 50 percent. The remaining program will emphasize long-term trends assessment for the nation's coastal waters and environmental processes and effects with generic applicability to marine pollution assessment. Site specific studies will be deemphasized. The specific project composition has not yet been determined.

COMMENTS OF NATIONAL MARINE POLLUTION PROGRAM OFFICE, NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, DEPARTMENT OF COMMERCE, FINAL GAO REPORT ENTITLED "NEED TO STRENGTHEN COORDINATION OF OCEAN POLLUTION RESEARCH" B-203956, DATED JULY 14, 1982

Department of Commerce comments pertinent to General Accounting Office Final Report, GAO/CED 82-108 dated July 14, 1982, on the "Need to Strengthen Coordination of Ocean Pollution Research" (B-203956).

COMMENTS ON RECOMMENDATIONS TO THE SECRETARY OF COMMERCE

GAO Recommendation

"We recommend that the Secretary of Commerce seek legislation amending the National Ocean Pollution Planning Act of 1978 to more fully realize the congressional purpose of effective coordination of ocean pollution research. The proposed legislation should be drafted after mechanisms or institutional arrangements used in other multiagency coordination programs have been reviewed for their applicability to the coordination of ocean pollution research. At a minimum the National Ocean Pollution Planning Act should be amended to give NOAA or an appropriate interagency coordinating committee, explicit authority to review Federal agency research budgets before they are approved by OMB."

Comments

The Department of Commerce does not support a move to gain interagency budget control for NOAA or the Interagency Committee for Ocean Pollution Research, Development, and Monitoring (COPRDM) through legislation. The GAO comparisons of COPRDM efforts to coordination of research on acid rain and cli-

mate are not entirely appropriate. The situation in the ocean pollution area is much more complex than in either of the areas cited by GAO. The scope of the National Marine Pollution Program Plan encompasses 100 individual programs (over 1000 projects) supported by eleven departments and individual agencies. There are at least 16 major pollution issues addressed by COPRDM agencies, any one of which is as complex as the acid rain issue. In addition, each department and agency has specific legislative mandates, and only some of these relate directly to pollution research. Competition for funds occurs within an agency among its own mandates, not across agencies among ocean pollution research needs. The implementation of the GAO recommendation would substantially disrupt the budget process traditionally followed by agencies which has in the past successfully addressed agency mandates. As an alternative to the approach recommended by GAO, the Department supports a process of informal budget coordination among OMB, COPRDM, and involved agencies. The possibility of performing informal budget coordination in selected program areas has been discussed with representatives from OMB.

GAO recommendation

"Also, we recommend that the Secretary direct the NOAA Administrator to prepare future ocean pollution research plan revisions so that they address, in more detail than has been the case in the past, (1) how Federal research money should be allocated so that the most important research gets done and limited research money is not diverted to less important programs and (2) how responsibilities should be allocated to agencies exploring similar ocean pollution issues to avoid duplication or inefficiently organized research."

Comments

The Department of Commerce agrees, in principle, with this recommendation. However, NOAA independently should not direct the resources and activities of another Federal agency. The allocation of money and responsibilities to an agency from ocean pollution research can only be accomplished through the cooperation and support of the agency. The Department remains committed to the Interagency Committee on Ocean Pollution Research, Development, and Monitoring (COPRDM) as the most appropriate way to encourage such cooperation and support. The COPRDM planning process involves the sorting out of agency responsibilities to avoid overlap or duplication and to facilitate the development of coordinated efforts. While this process can be improved, significant progress has been made. Initiatives identified in the second ocean pollution research plan specifically allocate research responsibilities to COPRDM agencies based on agency missions. In addition, as a result of the second plan, working groups are being established to define in more detail allocations of responsibilities among agencies. To the extent possible, these more detailed assignments will be reflected in future plans.

Mr. HUGHES. Thank you very much, and we appreciate your appearance.

Mr. EIDNESS. Thank you very much.

Mr. HUGHES. That completes our testimony for today.

The subcommittee stands adjourned.

[Whereupon, at 11:45 a.m., the subcommittee adjourned, subject to call.]